Gabel
09/527028


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     FILE 'REGISTRY' ENTERED AT 11:12:19 ON 13 JUL 2001
                  E POTASSIOUM CHLORIDE/CN 5
                  E POTASSIUM CHLORIDE/CN 5
L1             242 S POTASSIUM CHLORIDE ?/CN
                  E "1,3-DIMETHYL-2-THIOUREA"/CN 5
L2               1 S E3
                  E DODECYLTRIMETHYLAMMONIUM CHLORIDE/CN 5
L3               1 S E3
                  E POTASSIUM HYDROGEN PHOSPHATE/CN 5
L4               4 S POTASSIUM HYDROGEN PHOSPHATE ?/CN
                  E HYDROGEN CHLORIDE/CN 5
L5              34 S HYDROGEN CHLORIDE ?/CN
L6             282 S L1 OR L2 OR L3 OR L4 OR L5

                  E TRIMETHYLETHYLAMMONIUM BROMIDE/CN 5
                  E TRIMETHYLETHYL AMMONIUM BROMIDE/CN 5

     FILE 'CAPLUS' ENTERED AT 11:29:59 ON 13 JUL 2001
L1             242 SEA FILE=REGISTRY ABB=ON  PLU=ON  POTASSIUM CHLORIDE
                   ?/CN
L2               1 SEA FILE=REGISTRY ABB=ON  PLU=ON  "1,3-DIMETHYL-2-THIOURE
                   A"/CN
L3               1 SEA FILE=REGISTRY ABB=ON  PLU=ON  "DODECYLTRIMETHYLAMMONI
                   UM CHLORIDE"/CN
L4               4 SEA FILE=REGISTRY ABB=ON  PLU=ON  POTASSIUM HYDROGEN
                   PHOSPHATE ?/CN
L5              34 SEA FILE=REGISTRY ABB=ON  PLU=ON  HYDROGEN CHLORIDE ?/CN

L6             282 SEA FILE=REGISTRY ABB=ON  PLU=ON  L1 OR L2 OR L3 OR L4
                   OR L5
L7           86620 SEA FILE=CAPLUS ABB=ON  PLU=ON  (POTASSIUM OR K OR
                   DODECYLTRIMETHYLAMMON? OR DODECYL(W)(TRIMETHYLAMMON? OR
                   TRI(W)(METHYLAMMON? OR (ME OR METHYL)(W)AMMON?) OR
                   TRIMETHYL AMMON?) OR DODECYLTRI(W)(METHYLAMMON? OR (ME
                   OR METHYL)(W)AMMON?) OR DODECYLTRIMETHYL AMMON? OR H OR
                   HYDROGEN)(W)(CL OR CHLORIDE)
L8              68 SEA FILE=CAPLUS ABB=ON  PLU=ON  3(W)(DIMETHYL OR
                   DI(W)(ME OR METHYL))(1W)(THIOUREA OR THIO UREA)
L9           592098 SEA FILE=CAPLUS ABB=ON  PLU=ON  (POTASSIUM OR K)(W)(HYDRO
                   GEN OR H)(W)PHOSPHATE OR L6 OR KCL OR HCL
L10             51 SEA FILE=CAPLUS ABB=ON  PLU=ON  KHPO#
L13           6015 SEA FILE=CAPLUS ABB=ON  PLU=ON  (TRIMETHYL? OR TRI(W)(ME
                   OR METHYL?))(S)(BROMIDE OR BR)
L19          26407 SEA FILE=CAPLUS ABB=ON  PLU=ON  (DETERM? OR MEAS? OR
                   QUANT? OR DETECT? OR DET##)(5A)(LEU!OCYT? OR HEMOGLOBIN
                   OR HAEMOGLOBIN OR WBC OR RBC OR (RED OR WHITE)(W)BLOOD
                   OR HEME(3A)GLOBIN OR HB OR ERYTHROCYT?)
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L24 1172 SEA FILE=CAPLUS ABB=ON PLU=ON L19(L)(L7 OR L8 OR L9 OR L10 OR (HYDROCHLORIC OR HYDRO CHLORIC)(W)ACID OR REAGENT)
L25 31 SEA FILE=CAPLUS ABB=ON PLU=ON L24(L)(L13 OR DETERGENT)

L25 ANSWER 1 OF 31 CAPLUS COPYRIGHT 2001 ACS
ACCESSION NUMBER: 2000:686375 CAPLUS
DOCUMENT NUMBER: 133:219810
TITLE: Reagent for the determination of leukocytes and the measurement of hemoglobin in a blood sample
INVENTOR(S): Veriac, Sylvie; Champseix, Henri
PATENT ASSIGNEE(S): Abx, Fr.
SOURCE: Eur. Pat. Appl., 11 pp.
CODEN: EPXXDW
DOCUMENT TYPE: Patent
LANGUAGE: French
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 1039297	A1	20000927	EP 2000-400670	20000310
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO				
FR 2791138	A1	20000922	FR 1999-3467	19990319
FR 2791138	B1	20010427		
NO 2000001419	A	20000920	NO 2000-1419	20000317
JP 2000275242	A2	20001006	JP 2000-77711	20000321

PRIORITY APPLN. INFO.: FR 1999-3467 A 19990319

AB The invention concerns a **reagent** for the **detn.** of **leukocytes**, polynuclear basophilic structures, and Hb in blood samples contg. an acidic buffer, a cationic **detergent** and a nitrogen-compd. Thus a typical **reagent** contains **potassium chloride**, 1, **3-dimethyl-2-thiourea**, **dodecyltrimethyl ammonium chloride** and **potassium hydrogen phosphate/HCl**

REFERENCE COUNT: 7
REFERENCE(S):
(2) Ledis, S; US 4286963 A 1981 CAPLUS
(3) Matsuda, N; US 4617275 A 1986 CAPLUS
(5) Technicon Instr; EP 0177137 A 1986 CAPLUS
(6) Toa Medical Electronics; EP 0444240 A 1991 CAPLUS
(7) Toa Medical Electronics; EP 0695936 A 1996 CAPLUS
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L25 ANSWER 2 OF 31 CAPLUS COPYRIGHT 2001 ACS
ACCESSION NUMBER: 2000:98163 CAPLUS
DOCUMENT NUMBER: 132:134366
TITLE: Reagent for the assay of hemoglobin and the determination of leukocytes in a blood sample
INVENTOR(S): Veriac, Sylvie; Champseix, Henri
PATENT ASSIGNEE(S): ABX, Fr.
SOURCE: Eur. Pat. Appl., 11 pp.
CODEN: EPXXDW
DOCUMENT TYPE: Patent
LANGUAGE: French
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 978724	A1	20000209	EP 1999-401781	19990715
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO				
FR 2782166	A1	20000211	FR 1998-10010	19980804
FR 2782166	B1	20001006		
US 6114130	A	20000905	US 1999-352666	19990709
BR 9903325	A	20000509	BR 1999-3325	19990719
NO 9903762	A	20000207	NO 1999-3762	19990803
JP 2000055913	A2	20000225	JP 1999-219644	19990803
CN 1247982	A	20000322	CN 1999-111896	19990804

PRIORITY APPLN. INFO.: FR 1998-10010 A 19980804

AB The invention concerns **reagents** for the **detn.** of **Hb** and **leukocytes** in human and animal blood that contain a cationic **detergent**, a glycoside, inorg. salt, osmotic and/or leukocyte-protecting agent, and buffer to adjust the pH. Cationic **detergents** are acetates and chlorides of fatty acid amines, quaterner amines, **tri-Me** cethyl **bromides** etc. Thus a **reagent** contg. sodium chloride, the chloride of C15 fatty acid amine, triterpene saponin in sodium carbonate buffer was used for analyzing blood in an AMX automatic analyzer. Lymphocytes, monocytes, granulocytes and eosinophils were counted.

REFERENCE COUNT: 5
REFERENCE(S):
(1) Abx Sa; EP 0430750 A 1991
(2) Bayer Ag; EP 0743519 A 1996 CAPLUS
(3) Hycel Groupe Lisabio; FR 2735578 A 1996 CAPLUS
(4) Ledis, L; US 4751179 A 1988 CAPLUS
(5) Toa Medical Electronics; EP 0660113 A 1995 CAPLUS

L25 ANSWER 3 OF 31 CAPLUS COPYRIGHT 2001 ACS

ACCESSION NUMBER: 1998:735002 CAPLUS
DOCUMENT NUMBER: 130:2001
TITLE: Cyanide-free reagent and method for hemoglobin determination and leukocyte differentiation
INVENTOR(S): Riesgo, Mirta I.; Young, Carole Jo
PATENT ASSIGNEE(S): Coulter Corporation, USA
SOURCE: U.S., 15 pp.
CODEN: USXXAM
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 5834315	A	19981110	US 1994-370775	19941223
CN 1215168	A	19990428	CN 1997-126470	19971017

PRIORITY APPLN. INFO.: US 1994-370775 19941223
AB A reagent compn. which does not contain cyanide ions and a method for measuring Hb concn. in a blood sample. In addn., the reagent compn. can be used to measure Hb concn. and differentiate at least two subpopulations of leukocytes from the same reaction product of the reagent compn. and a blood sample. The reagent compn. comprises at least one lysing agent selected from the group consisting of a quaternary ammonium salt, a pyridinium salt, and combinations thereof, in an amt. effective to adequately lyse the erythrocytes and elute the Hb, an antioxidant in an amt. effective to convert the released Hb into to a hemochromogen. The pH can be adjusting with a pH agent to provide a pH ranging from 5 to 11.5.
REFERENCE COUNT: 24
REFERENCE(S): (1) Anon; EP 0123868 1984 CAPLUS
(2) Anon; EP 0184787 1985 CAPLUS
(3) Anon; EP 0424871 1990 CAPLUS
(4) Anon; WO 9524651 1995 CAPLUS
(5) Anon; WO 9602841 1996 CAPLUS
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L25 ANSWER 4 OF 31 CAPLUS COPYRIGHT 2001 ACS
ACCESSION NUMBER: 1998:719097 CAPLUS
DOCUMENT NUMBER: 129:341443
TITLE: Methods and reagent compositions for the determination of membrane surface area and sphericity of erythrocytes and reticulocytes for the diagnosis of red blood cell disorders
INVENTOR(S): Sorette, Martin P.
PATENT ASSIGNEE(S): Bayer Corporation, USA
SOURCE: U.S., 14 pp.
CODEN: USXXAM

DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 5830764	A	19981103	US 1996-745830	19961112

AB The invention describes improved methods and **reagent** compns. employed therein to det. the existence of blood disorders such as hemolytic anemias in a blood sample obtained from an individual. The methods are preferably carried out on an automated flow cytometer and encompass **detg**. if the individual's **red blood** cells have undergone a loss of membrane surface area by providing measurements of the surface area and the sphericity of the red blood cells in a whole blood sample as a function of osmolality. The method and **reagent** compns. used therein provide for the first time accurate measurements of the surface areas of both the mature red blood cell and the reticulocyte populations in a whole blood sample. The method and **reagents** of the invention promise to shed new insights into reticulocyte membrane remodeling in various red cell disorders. A series of **reagent** solns. was prepd. having a base compn. of pH 7.4 sodium phosphate buffer and 8.0 mg/L zwitterionic **detergent** TDAPS and varying concns. of NaCl to give solns. with osmolalities ranging from 50-290 mOsm. Aliquots of freshly drawn blood were mixed with the **reagent** solns. and analyzed on a Bayer-Technicon H flow cytometer.

L25 ANSWER 5 OF 31 CAPLUS COPYRIGHT 2001 ACS
ACCESSION NUMBER: 1997:730199 CAPLUS
DOCUMENT NUMBER: 127:316548
TITLE: Multicomponent flow cytometry reagent system
INVENTOR(S): Imre, Janos; Nagy, Janos; Ferenci, Laszlo
PATENT ASSIGNEE(S): Imre, Janos, Hung.; Nagy, Janos; Ferenci, Laszlo
SOURCE: Hung. Teljes, 19 pp.
CODEN: HUXXBU
DOCUMENT TYPE: Patent
LANGUAGE: Hungarian
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
HU 74914	A2	19970328	HU 1994-3779	19941223

AB Dilg. solns. for the title **reagents** are described, suitable for whole blood diln., leukocyte differentiation into 5 subpopulations, based on laser diffraction, **quant**. and

size **detn.** of **erythrocyt s** and thrombocytes, as well as the **detn.** of **Hb** and related parameters. Also given are lysing/leukoprotective/flow-orienting **reagents** for leukocyte differentiation and lysing/**Hb reagents** for **Hb detn.** The former comprise C1-10 aliph. alcs. and/or aliph. and/or arom. glycol ethers in addn to buffers, **detergents**, and, optionally antioxidants and stabilizers.

L25 ANSWER 6 OF 31 CAPLUS COPYRIGHT 2001 ACS
ACCESSION NUMBER: 1996:574690 CAPLUS
DOCUMENT NUMBER: 125:216397
TITLE: Set of reagents determining the content of total Hb
INVENTOR(S): Bona, Vittorio; Vorberg, Ewald; Witzigmann, Achim
PATENT ASSIGNEE(S): F. Hoffmann-La Roche Ag, Switz.
SOURCE: Eur. Pat. Appl., 10 pp.
CODEN: EPXXDW
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 729031	A1	19960828	EP 1996-102222	19960215
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LI, LU, NL, PT				
CA 2169882	AA	19960825	CA 1996-2169882	19960220
JP 08262027	A2	19961011	JP 1996-36873	19960223

PRIORITY APPLN. INFO.: EP 1995-102635 19950224

AB The invention relates to **reagents** and methods for **detg.** the content of total **Hb** in a blood sample or a sample derived from blood. The invention proposes: - a set of **reagents** for **detg.** the content of total **Hb** in a blood sample or a sample derived from blood, comprising a hemolysis **reagent** which is an acidic soln. having a pH between 0.5 and 5.0, preferably between 0.5 to 3.0, and a green chromophore forming **reagent** which is a basic soln. having a pH between 7.0 and 12.0, preferably between 9.0 and 11.5, and contg. a non-ionic **detergent** and/or an anionic **detergent.** - A method of **detg.** the content of total **Hb** in a blood sample or a sample derived from blood which uses the above set of **reagents.**

L25 ANSWER 7 OF 31 CAPLUS COPYRIGHT 2001 ACS
ACCESSION NUMBER: 1996:126341 CAPLUS
DOCUMENT NUMBER: 124:169789

TITLE: Mathematical correction of the hemoglobin interference in the determination of serum iron (II + III)
AUTHOR(S): Cardenas, M. C.; Bonilla, I.; Perez, R.; Diez, S.; Torrejon, M. J.; Barbera, G.
CORPORATE SOURCE: Centro Especialidades Avenida Portugal, Madrid, Spain
SOURCE: Rev. Soc. Esp. Bioquim. Clin. Patol. Mol. (1995), 14(6), 373-6
CODEN: RSQCFW
DOCUMENT TYPE: Journal
LANGUAGE: Spanish

AB Hb causes interference in iron (II + III) detn. To avoid that, it is necessary to obtain a non hemolyzed sample or to take into account that interference prior to result interpretation. The aim of this paper is the characterization and inference of math. correction of **Hb** interference in the **detn.** of iron (II + III) serum concn. as measured by the Ferrozine method without deproteinization, using two **reagents** with and without **detergent** in their compn. The authors found a clin. significant interference using both reactives. In the case of the **reagent** without **detergent** the interference was dependent of the concns. of both iron (II + III) and Hb. The interference was pos. or neg. depending upon Hb concn. The interference was pos. and iron (II + III) concn. independent in the case of the **reagent** with **detergent**. This correction applied to patients samples provided good results. The authors conclude that math. correction can be used for iron (II + III) detn. in hemolyzed samples, where a clin. significant interference exits and to obtain a new sample is difficult.

L25 ANSWER 8 OF 31 CAPLUS COPYRIGHT 2001 ACS
ACCESSION NUMBER: 1996:50454 CAPLUS
DOCUMENT NUMBER: 124:81496
TITLE: Method for detecting hemoglobin advanced glycosylation end products
INVENTOR(S): Founds, Henry W.; Yamin, Michael A.; Bucala, Richard J.; Cerami, Anthony
PATENT ASSIGNEE(S): Alteon Inc., USA
SOURCE: PCT Int. Appl., 42 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE

WO 9530153	A1	19951109	WO 1995-US5301	19950428
W: CA, JP, MX				
RW: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE				
US 5610076	A	19970311	US 1994-236416	19940429
CA 2188920	AA	19951109	CA 1995-2188920	19950428
EP 757795	A1	19970212	EP 1995-917751	19950428
EP 757795	B1	19990707		
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LI, LU, MC, NL, PT, SE				
JP 10504640	T2	19980506	JP 1995-528418	19950428
AT 182008	E	19990715	AT 1995-917751	19950428

PRIORITY APPLN. INFO.: US 1994-236416 19940429
WO 1995-US5301 19950428

AB The present invention relates to methods for the diagnosis and monitoring of diseases and disorders assocd. with advanced glycosylation end products (AGE) formation, such as diabetes and the aging process. In particular, the invention is directed to **detecting** AGE-modified **Hb** (**Hb**-AGE) for the foregoing purposes, and in improved ELISA therefore. The method involves dilg. the sample in a diln. buffer, which diln. buffer comprises an anionic protein denaturing **detergent** at a concn. sufficient to denature Hb-AGE without interfering in binding of **reagents** with Hb-AGE; the diln. buffer may also include a non-ionic surfactant at a concn. sufficient to facilitate **detection** of **Hb**-AGE; and a denaturing agent at a concn. sufficient to denature Hb-AGE and increase assay sensitivity, without denaturing binding of **reagents** to Hb-AGE. After dilg. the sample in the diln. buffer, the sample is contacted with means for **detecting** the presence of **Hb**-AGE in the sample, and the presence of **Hb**-AGE in the sample is **detected** with the detection means. Diln. buffers and kits for practicing the invention are also provided. In specific examples, the level of AGE in Hb in samples from human and rat normal subjects and diabetic subjects is detected. The results obtained from human samples show a high degree of correlation between the level of Hb-AGE in a sample and the level of Hb A1c in a sample. Most importantly, the invention is used to detect the "aminoguanidine effect", which is the decrease in the level of Hb-AGE in a sample from a subject undergoing therapy with the AGE-inhibitor aminoguanidine.

L25 ANSWER 9 OF 31 CAPLUS COPYRIGHT 2001 ACS
ACCESSION NUMBER: 1994:625303 CAPLUS
DOCUMENT NUMBER: 121:225303
TITLE: Analytical review in clinical biochemistry: methods for assaying serum glycated proteins
AUTHOR(S): Kurt, Ismail; Kutluay, Turker; Karaca, Levent

CORPORATE SOURCE: Med. Fac., GATA, Turk.
SOURCE: Biyokim. Derg. (1993), 18(4), 109-38
CODEN: BIDEDV; ISSN: 0250-4685
DOCUMENT TYPE: Journal; General Review
LANGUAGE: Turkish

AB A review and discussion with 132 refs. Nonenzymic glycation of proteins is thought to be partly responsible for long-term tissue complications of diabetes by mechanisms such as crosslinking of proteins, alterations in immunogenicity, and enzyme function. At the present time, the **detn.** of glycated **Hb** and glycated serum proteins (fructosamine) is used extensively to assess long-term control of glycemia in diabetic patients. Serum fructosamine reflects the av. blood glucose concn. over the past 2-3 wk as compared with glycated Hb which represents 6-8 wk. Here, the newly developped methods of measuring glycated proteins in serum without considering methods of glycated Hb are investigated. The authors specially focused on the nitroblue tetrazolium method in detail because it has a more suitable approach for routine anal. Different methods have been described for measuring glycated serum proteins, but those based on nitroblue tetrazolium have gained popularity because of procedural simplicity, low operational cost, and the ability to be automated. Most recently, the use of glycated polylysine as a primary std. and a modified **reagent** contg. **detergent** and uricase contributed to a considerable improvement in the specifity of the method and interlab. standardization of the fructosamine assay.

L25 ANSWER 10 OF 31 CAPLUS COPYRIGHT 2001 ACS
ACCESSION NUMBER: 1993:577161 CAPLUS
DOCUMENT NUMBER: 119:177161
TITLE: Immunological determination of Hb A1c
INVENTOR(S): Karl, Johann; Kerscher, Lorenz; Schneider, Erich
PATENT ASSIGNEE(S): Boehringer Mannheim GmbH, Germany
SOURCE: Eur. Pat. Appl., 20 pp.
CODEN: EPXXDW
DOCUMENT TYPE: Patent
LANGUAGE: German
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 559164	A2	19930908	EP 1993-103349	19930303
EP 559164	A3	19940126		
EP 559164	B1	20000524		
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LI, LU, NL, PT, SE				
DE 4206932	A1	19930909	DE 1992-4206932	19920305

AU 9333871	A1	19930916	AU 1993-33871	19930301
AU 652092	B2	19940811		
NO 9300770	A	19930906	NO 1993-770	19930303
AT 193378	E	20000615	AT 1993-103349	19930303
ES 2148190	T3	20001016	ES 1993-103349	19930303
CA 2090981	AA	19930906	CA 1993-2090981	19930304
CN 1081765	A	19940209	CN 1993-104037	19930304
ZA 9301533	A	19940904	ZA 1993-1533	19930304
HU 70463	A2	19951030	HU 1993-596	19930304
US 5541117	A	19960730	US 1993-26464	19930304
JP 06011510	A2	19940121	JP 1993-45130	19930305
JP 2637677	B2	19970806		

PRIORITY APPLN. INFO.: DE 1992-4206932 A 19920305

AB **Hb** A1c is **detd.** immunol. in blood after hemolysis at pH 5-9.5 with a **reagent** contg. an ionic **detergent**. Total **Hb** may be **detd.** in the same hemolyzate by std. methods. Thus, a hemolysis **reagent** contg. 20 mM Na phosphate buffer (pH 7.0), 1.0% SDS, 0.1% NaN3, 0.02% K3Fe(CN)6, and 0.5% Brij 35, mixed 1:100 with a blood sample, induced hemolysis within 2 min at 25.degree.. A reaction buffer contg. poly- and monoclonal antibodies to Hb A1c was added, the total Hb absorbance at 546 nm was read after 4 min, a polyhapten soln. contg. Hb A1c conjugated to bovine serum albumin was added, and the change in absorbance due to turbidity development was measured at 340 nm as a **measure** of **Hb** A1c concn.

L25 ANSWER 11 OF 31 CAPLUS COPYRIGHT 2001 ACS

ACCESSION NUMBER: 1989:420354 CAPLUS

DOCUMENT NUMBER: 111:20354

TITLE: Observations on the alkaline hematin/detergent complex proposed for measuring hemoglobin concentration

AUTHOR(S): Van Assendelft, O. W.; Zijlstra, W. G.

CORPORATE SOURCE: Cent. Infect. Dis., U. S. Dep. Health Hum. Serv., Atlanta, GA, 30333, USA

SOURCE: J. Clin. Chem. Clin. Biochem. (1989), 27(4), 191-5
CODEN: JCCBDT; ISSN: 0340-076X

DOCUMENT TYPE: Journal

LANGUAGE: English

AB The alk. hematin D-575 method for **detg. Hb**, described by R. Zander et al. (1984), was tested. Claims that different nonionic **detergents** in the **reagent** result in identical values for the **Hb** concn. being **measured** could not be verified. It could also not be verified that a stable end-product with unique spectral characteristics is always reached within approx. 2 min and that conversion of fetal Hb is faster than that with the hemiglobin

cyanide method. Because of the many questions regarding the nature and characteristics of the alk. hematin/**detergent** complex or complexes, it is not yet possible to recommend this method for routine hemoglobinometry.

L25 ANSWER 12 OF 31 CAPLUS COPYRIGHT 2001 ACS
ACCESSION NUMBER: 1989:91671 CAPLUS
DOCUMENT NUMBER: 110:91671
TITLE: Method and reagents for the volumetric differentiation of blood cell types
INVENTOR(S): Lapicola, James D.; Edmondson, Sherburne M., Jr.
PATENT ASSIGNEE(S): Sequoia-Turner Corp., USA; Hematology Marketing Associates, Inc.
SOURCE: U.S., 8 pp. Division of U.S. Ser. No. 772,666, abandoned.
CODEN: USXXAM
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 4745071	A	19880517	US 1986-914637	19861002

PRIORITY APPLN. INFO.: US 1985-772666 19850905
OTHER SOURCE(S): MARPAT 110:91671
AB Improved **reagents** and methods for obtaining distinct differentiation of platelets, erythrocytes, and certain leukocyte subpopulations are disclosed. 1,3-Dimethylurea is a cell stabilizing agent for use in the blood diluent **reagent**. A diluent and a wetting agent (e.g. Diazopon) are combined to provide a hematol. analyzer **detergent** with the necessary attributes for an automatic analyzer. The lysing **reagent** is selective and intrinsically gentle and comprises an aq. soln. of a single quaternary ammonium salt. Leukocyte subpopulation volumetric differentiation in an automated system comprises mixing a whole blood sample with the diluent, adding the lysing agent extremely slowly, and analyzing the sample on an automatic particle analyzer to enumerate the lymphocyte and neutrophilic granulocyte subpopulations and to **quant**. evaluate the infrequent and rare **leukocyte** subpopulations. Automated hematol. anal. involved feeding a mixt. of whole blood and diluent, comprising Na2SO4 10.0, NaCl 4.2, 1,3-dimethylurea 1.0, 1-hydroxypyridine-2-thione 0.1, ADA buffer 1.4, NaOH 0.5 g, and water to 1 L, into a white cell counting bath; slowly adding lysing agent, comprising **dodecyltrimethylammonium chloride** (50% wt./vol.) 75, KCN 150 mg, and water to 1 L, to the counting bath; and analyzing the mixt. The normal leukocyte distribution had 76%

neutrophils, 20% lymphocytes, and 4% infrequent leukocytes. A patient with a severe deficiency of lymphocytes had a distribution of 87%, 7%, and 6%, resp.

L25 ANSWER 13 OF 31 CAPLUS COPYRIGHT 2001 ACS
ACCESSION NUMBER: 1988:568515 CAPLUS
DOCUMENT NUMBER: 109:168515
TITLE: Characterization of the D, c, E and G antigens of the Rh blood group system with human monoclonal antibodies
AUTHOR(S): Bloy, C.; Blanchard, D.; Lambin, P.; Goossens, D.; Rouger, P.; Salmon, C.; Masouredis, S. P.; Cartron, J. P.
CORPORATE SOURCE: Inst. Natl. Transfus. Sang., Paris, 75015, Fr.
SOURCE: Mol. Immunol. (1988), 25(9), 925-30
CODEN: MOIMD5; ISSN: 0161-5890
DOCUMENT TYPE: Journal
LANGUAGE: English
AB The human MAbs, anti-D, -c, -E, and -G of the Rh blood group system, produced by Epstein-Barr virus transformed B-cell lines, were purified by protein A-Sepharose chromatog. and used to characterize the Rh antigens of human red cells. Scatchard plot analyses performed with the radiolabeled MAbs indicated that each R2R2 red cell carries 0.43, 0.32, and 0.38 .times. 105 D, c, and E binding sites, resp. About half this no. of antigen sites are present on **erythrocytes** from heterozygote individuals as **detd** . by using the appropriate antibody. However, only 0.18 .times. 105 G antigenic sites were present on each R1R1 red cell. The affinity consts. of the anti-D, -E, and -G were similar varying from 0.6 to 1.5 .times. 108 M-1 whereas that of the anti-c was much lower (0.035 .times. 106 M-1). The blood group specificity and binding properties indicate that the MAbs behave like the polyclonal anti-Rh **reagents**. Immunopptn. expts. carried out with membranes from R2R2 red cells show that a 30-32 kDa component can be identified whatever antibody used. The immune complexes involving anti-c, -E, or -G antibodies could be formed with the **detergent** lysates from red cell membranes. In contrast, membrane integrity was a prerequisite for the binding of the anti-D antibodies. From extn. studies of immune complexes with non-ionic **detergents** it was concluded that all Rh-active components are bound to the membrane skeleton, suggesting that these mols. may have important function for maintaining red cell shape and viability.

L25 ANSWER 14 OF 31 CAPLUS COPYRIGHT 2001 ACS
ACCESSION NUMBER: 1986:64815 CAPLUS
DOCUMENT NUMBER: 104:64815
TITLE: Analytical method and agent for detecting

esterolytic and/or proteolytic enzymes
INVENTOR(S): Schnabel, Eugen
PATENT ASSIGNEE(S): Miles Laboratories, Inc. , USA
SOURCE: Ger. Offen., 36 pp.
CODEN: GWXXBX
DOCUMENT TYPE: Patent
LANGUAGE: German
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
DE 3413120	A1	19851024	DE 1984-3413120	19840406
US 4755462	A	19880705	US 1985-710625	19850311
CA 1253056	A1	19890425	CA 1985-476271	19850312
CA 1254116	A1	19890516	CA 1985-476408	19850313
AU 8540409	A1	19851010	AU 1985-40409	19850327
AU 551478	B2	19860501		
EP 158224	A2	19851016	EP 1985-103671	19850327
EP 158224	A3	19871028		
EP 158224	B1	19910724		
R: DE, FR, GB, IT, NL, SE				
ES 541776	A1	19860601	ES 1985-541776	19850329
JP 60227699	A2	19851112	JP 1985-70163	19850404
JP 05050277	B4	19930728		

PRIORITY APPLN. INFO.: DE 1984-3413120 19840406

AB Esterases and proteinases are **detected**, e.g. for demonstration of **leukocytes** in the urine, with an amino acid or peptide ester of a phenol as chromogenic substrate and an amino acid homo- or copolymer (mol. wt. 103-2 .times. 106) to accelerate the reaction. These **reagents** may be incorporated into a test strip or table for enzyme detection. A **detergent** maybe added to promote release of the enzyme from leukocytes. For example, the hydrolysis of 5-(N-tosyl-L-alanyloxy)-1,2-benzisothiazole by **detergent**-treated leukocytes was accelerated 7.8-fold in the presence of poly-L-lysine (mol. 14,000) (125 .mu.g/4.5 mL.

L25 ANSWER 15 OF 31 CAPLUS COPYRIGHT 2001 ACS
ACCESSION NUMBER: 1985:109395 CAPLUS
DOCUMENT NUMBER: 102:109395
TITLE: Reagent for combined diluting and lysing of whole blood
INVENTOR(S): Larsen, Fred L.
PATENT ASSIGNEE(S): Coulter Electronics, Inc., USA
SOURCE: PCT Int. Appl., 20 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent

LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 8404969	A1	19841220	WO 1984-US768	19840518
W: AU, DE, GB, JP				
RW: AT, BE, CH, DE, FR, GB, LU, NL, SE				
US 4529705	A	19850716	US 1983-501028	19830606
AU 8429696	A1	19850104	AU 1984-29696	19840518
EP 146590	A1	19850703	EP 1984-902276	19840518
R: BE, CH, DE, FR, GB, LI, SE				
JP 60501522	T2	19850912	JP 1984-502232	19840518
CA 1222679	A1	19870609	CA 1984-455060	19840524

PRIORITY APPLN. INFO.: US 1983-501028 19830606
WO 1984-US768 19840518

AB An improved aq. **reagent** which prevents platelet aggregation is described for simultaneous dilg. and lysing of whole blood for use in automated electronic instruments for simultaneous **Hb detn.** and **white blood** cell counting. The **reagent** consists of a quaternary ammonium salt **detergent** for lysis, a salt of an anion (SO4-2, CO3-, HCOO-, OAc-) for dispersing platelet aggregates, and a chromogen-forming agent (e.g., KCN) for **Hb detn.** Thus, a **reagent** was prepd. contg. NaH2PO4, Na2HPO4, Na2SO4, polyethoxylated alkyl PhOH, cetyldimethylethylammonium bromide, NaNO2, Na nitroferricyanide, and KCN, and its pH was adjusted to 8.2-8.8 with phosphate buffer. The **reagent** (10 .mu.L) was then used to dil. capillary blood (20 .mu.L) for **Hb** and **white blood** cell count **detn.** in a HEMO-W instrument connected to a C-1000 Channelyzer. Obtained Hb and white cell count values agreed with ref. values, and no platelet aggregation was obsd.

L25 ANSWER 16 OF 31 CAPLUS COPYRIGHT 2001 ACS
ACCESSION NUMBER: 1985:60190 CAPLUS
DOCUMENT NUMBER: 102:60190
TITLE: Pattern of endogenous lectins in a human epithelial tumor
AUTHOR(S): Gabius, Hans Joachim; Engelhardt, Reinhild; Cramer, Friedrich; Baetge, Rolf; Nagel, Gerd A.
CORPORATE SOURCE: Abt. Chem., Max-Planck-Inst. Exp. Med., Goettingen, D-3400, Fed. Rep. Ger.
SOURCE: Cancer Res. (1985), 45(1), 253-7
CODEN: CNREA8; ISSN: 0008-5472
DOCUMENT TYPE: Journal
LANGUAGE: English

AB Salt and **detergent** exts. of a malignant epithelial tumor, obtained by extn. of acetone powder, were fractionated on different sets of Sepharose columns covalently derivatized with lactose, asialofetuin, melibiose, mannan, fucose, and heparin. Successive elution by chelating **reagent** and specific sugar resulted in isolation of different Ca2+-dependent and Ca2+-independent endogenous carbohydrate-binding proteins, as analyzed by gel electrophoresis. Certain bands represent newly identified proteins capable of binding to lactose [at mol. wt. (Mr) 648000], melibiose (at Mr 28,000), and fucose (at Mr 62,000 and 70,000). Other carbohydrate-binding proteins isolated from this human tumor have been identified in normal, esp. embryonic, tissues of different nonhuman vertebrates. The carbohydrate-binding proteins are assayable as agglutinin with rabbit **erythrocytes** and show no **detectable** enzymic activity. They can thus be defined as lectins. The presence of a complex pattern of endogenous lectins and their biochem. characteristics may contribute to an understanding of intercellular interaction during the complex process of metastatic spread and may furthermore provide a new tool for diagnosis and a lectin-based therapy.

L25 ANSWER 17 OF 31 CAPLUS COPYRIGHT 2001 ACS
ACCESSION NUMBER: 1985:42496 CAPLUS
DOCUMENT NUMBER: 102:42496
TITLE: Method and reagent for determining a hemoglobin-haptoglobin complex in the presence of free hemoglobin
INVENTOR(S): Schmitt, Urban; Deeg, Rolf; Ziegenhorn, Joachim
PATENT ASSIGNEE(S): Boehringer Mannheim G.m.b.H. , Fed. Rep. Ger.
SOURCE: Ger. Offen., 23 pp.
CODEN: GWXXBX
DOCUMENT TYPE: Patent
LANGUAGE: German
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
DE 3314308	A1	19841025	DE 1983-3314308	19830420
CA 1209888	A1	19860819	CA 1984-451045	19840330
EP 125513	A1	19841121	EP 1984-104240	19840414
EP 125513	B1	19870909		
R: AT, BE, CH, DE, FR, GB, IT, LI, LU, NL, SE				
AT 29596	E	19870915	AT 1984-104240	19840414
AU 8426869	A1	19841025	AU 1984-26869	19840416
AU 547468	B2	19851024		
ES 531645	A1	19841201	ES 1984-531645	19840416
DD 223537	A5	19850612	DD 1984-262051	19840417

JP 59198997	A2	19841110	JP 1984-77650	19840419
US 4695552	A	19870922	US 1984-601801	19840419
PRIORITY APPLN. INFO.:			DE 1983-3314308	19830420
			EP 1984-104240	19840414

AB **Hb**-haptoglobin complexes are **detd.** by taking advantage of the different peroxidative properties of free and bound Hbs, i.e., the peroxidase activity of free Hb is selectively inhibited with a **detergent** (e.g., saponin, lanolin), and the residual peroxidase activity present in the complex is measured. A **reagent** is also given that includes a peroxide and chromogenic substrate for the detn. of peroxidase activity as well as an inhibitor for free Hb. With suitable adjustments, the method also may be used for the detn. of haptoglobin or glycoHb. For the detn. of haptoglobin, a sample is treated with an excess of Hb, and the **Hb**-haptoglobin complex formed is **detd.**, and for the detn. of glycoHb, the peroxidase activity of the glycoHb-haptoglobin complex is measured.

L25 ANSWER 18 OF 31 CAPLUS COPYRIGHT 2001 ACS

ACCESSION NUMBER:	1984:117377 CAPLUS
DOCUMENT NUMBER:	100:117377
TITLE:	Alkaline hematin D-575, a new tool for the determination of hemoglobin as an alternative to the cyanhemiglobin method. I. Description of the method
AUTHOR(S):	Zander, Rolf; Lang, Werner; Wolf, H. Uwe
CORPORATE SOURCE:	Physiol. Inst., Univ. Mainz, Mainz, D-6500, Fed. Rep. Ger.
SOURCE:	Clin. Chim. Acta (1984), 136(1), 83-93 CODEN: CCATAR; ISSN: 0009-8981
DOCUMENT TYPE:	Journal
LANGUAGE:	English

AB A new method for the rapid and accurate **measurement** of **Hb** was developed as an alternative to the conventional cyanhemiglobin method. This method is based on the conversion of all heme, Hb, and hemiglobin species into a stable end product by an alk. soln. of a nonionic **detergent** (AHD **reagent**). The reaction product, designated as alk. hematin D-575, is extremely stable and shows a characteristic absorption peak at 575 nm. As compared to the cyanhemiglobin method, the **detn.** of **Hb** by alk. hematin D-575 offers several advantages such as: (1) extreme stability of the AHD **reagent** and the conversion product; (2) decreased conversion time of all Hb species into the end product; (3) decreased amts. of plasma and cell errors and errors caused by delayed conversion of carboxy- and fetal Hbs; and (4) standardization by a primary std. (purified cryst. chlorohemin).

L25 ANSWER 19 OF 31 CAPLUS COPYRIGHT 2001 ACS
ACCESSION NUMBER: 1983:122300 CAPLUS
DOCUMENT NUMBER: 98:122300
TITLE: Modification of the method for determination of hemoglobin concentration in blood
AUTHOR(S): Gutoranov, V.
CORPORATE SOURCE: Raionnaya Transp. Ob'edin. Bol'n., Russe, Bulg.
SOURCE: Lab. Delo (1983), (2), 9-11
CODEN: LABDAZ; ISSN: 0023-6748
DOCUMENT TYPE: Journal
LANGUAGE: Russian
AB The proposed modified method for the **detn.** of **Hbs** involves the addn. of 20 .mu.L blood to 5 mL **reagent** (2.5 mmol/L Sorensen phosphate buffer, 0.6 mmol/L K3Fe(CN)6, 0.465 mmol/L Na azide, 0.1% **detergent** (1 mL Vero) dissolved in 1 L water; pH 7.2). The absorbance of the soln. is measured at 540 nm after 3 min till 24 h. Effects of other **detergents** on the spectral properties of azidoHb complexes are discussed.

L25 ANSWER 20 OF 31 CAPLUS COPYRIGHT 2001 ACS
ACCESSION NUMBER: 1982:177262 CAPLUS
DOCUMENT NUMBER: 96:177262
TITLE: Hemoglobinometry in human blood
AUTHOR(S): Tentori, Leonardo; Salvati, A. M.
CORPORATE SOURCE: Lab. Patol. Infettiva, Inst. Super. Sanita, Rome, 00161, Italy
SOURCE: Methods Enzymol. (1981), 76(Hemoglobins), 707-15
CODEN: MENZAU; ISSN: 0076-6879
DOCUMENT TYPE: Journal
LANGUAGE: English
AB Methods which may use a photoelec. hemoglobinometer, photometer, or spectrophotometer are described for the **detn.** of **Hb** in blood as cyanometHb following diln. of the blood with a **reagent** contg. K3Fe(CN)6, KCN, KH2PO4, and a nonionic **detergent**. Information is also provided on modified **reagents** for cyanometHb detn., errors in the cyanometHb method, and **Hb detn.** by electronic counters.

L25 ANSWER 21 OF 31 CAPLUS COPYRIGHT 2001 ACS
ACCESSION NUMBER: 1982:139271 CAPLUS
DOCUMENT NUMBER: 96:139271
TITLE: Reagent for the determination of hemoglobin
INVENTOR(S): Frank, Georg; Wehling, Klaus
PATENT ASSIGNEE(S): Bayer A.-G. , Fed. Rep. Ger.
SOURCE: Eur. Pat. Appl., 10 pp.
CODEN: EPXXDW
DOCUMENT TYPE: Patent
LANGUAGE: German

FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 43483	A2	19820113	EP 1981-104780	19810622
EP 43483	A3	19820120		
EP 43483	B1	19840620		
R: AT, BE, CH, DE, FR, GB, IT, NL, SE				
DE 3024835	A1	19820128	DE 1980-3024835	19800701
US 4349351	A	19820914	US 1981-271073	19810608
AT 8080	E	19840715	AT 1981-104780	19810622
JP 57056754	A2	19820405	JP 1981-98460	19810626
JP 63041023	B4	19880815		
AU 8172353	A1	19820107	AU 1981-72353	19810629
AU 540915	B2	19841206		
BR 8104160	A	19820316	BR 1981-4160	19810630
ES 503537	A1	19820601	ES 1981-503537	19810630
PRIORITY APPLN. INFO.:			DE 1980-3024835	19800701
			EP 1981-104780	19810622

AB A **reagent** is described for the spectrophotometric **detn.** of **Hb** in disposable, plastic cuvettes (e.g., polystyrene). The **reagent** consists of KCN, K hexacyanoferrate, buffer, and a **detergent**. The pH range is 7.1-7.3, and KCN is present in the range 90-120 mg/L. The title **reagent** is stable in polystyrene cuvettes for .gtoreq.12 mo. Values detd. by the title method agreed well with those detd. by a ref. method (r = 0.9934).

L25 ANSWER 22 OF 31 CAPLUS COPYRIGHT 2001 ACS
ACCESSION NUMBER: 1982:82109 CAPLUS
DOCUMENT NUMBER: 96:82109
TITLE: A rapid and sensitive assay for determination of cholesterol in membrane lipid extracts
AUTHOR(S): Ott, Peter; Binggeli, Yvonne; Brodbeck, Urs
CORPORATE SOURCE: Med.-Chem. Inst., Univ. Berne, Bern, CH-3000/9, Switz.
SOURCE: Biochim. Biophys. Acta (1982), 685(2), 211-13
CODEN: BBACAQ; ISSN: 0006-3002
DOCUMENT TYPE: Journal
LANGUAGE: English

AB A com. available enzymic assay (Boehringer Monotest) for serum cholesterol(I) was modified to allow its rapid and sensitive detn. in membrane lipid exts. This was achieved by adding 0.5% Triton X 100 to the **reagent** soln. The **detergent** did not interfere with the assay. The relation between the amt. of I per assay and the absorbance at 500 nm was linear .ltoreq.100 .mu.g. The recovery in the assay was better than 95%. The assay was

applied to the **detn.** of I in **erythrocyte** membrane lipid exts.

L25 ANSWER 23 OF 31 CAPLUS COPYRIGHT 2001 ACS
ACCESSION NUMBER: 1982:2707 CAPLUS
DOCUMENT NUMBER: 96:2707
TITLE: Human erythrocyte cytosol phosphatidyl-inositol-bisphosphate phosphatase
AUTHOR(S): Roach, P. D.; St. C. Palmer, F. B.
CORPORATE SOURCE: Dep. Biochem., Dalhousie Univ., Halifax, NS, B3H 4H7, Can.
SOURCE: Biochim. Biophys. Acta (1981), 661(2), 323-33
CODEN: BBACAQ; ISSN: 0006-3002
DOCUMENT TYPE: Journal
LANGUAGE: English
AB Phosphatidylinositol 4,5-diphosphatase (EC 3.1.3.36) (I) was **detected** in human **erythrocytes** and partially purified from the cytosol. Hb was removed by (NH4)2SO4 fractionation and chromatog. on CM-Sepharose CL-6B. A 27,000-fold purifn. was achieved following gel filtration, ion-exchange chromatog., and hydrophobic chromatog. Although the prepn. was not homogeneous, the mol. wt. of I was estd. as 105,000 by gel filtration. I was stabilized by Triton X-100. I was active with 1-(3-sn-phosphatidyl)-D-myo-inositol 4,5-diphosphate and, to a lesser extent, with myo-inositol 1,4,5-triphosphate, but not with 1-(3-sn-phosphatidyl)-D-myo-inositol 4-phosphate nor a variety of other lipid and nonlipid phosphate esters. In the presence of both cationic and nonionic **detergents**, the effects of divalent cations were independent of substrate concn. Mg2+ was required (Km = 12 .mu.M). The Km for the substrate was 0.27 mM and the sp. activity was 765 nmol/min/mg protein. Inhibition by Ca2+ (Ki = 50 .mu.M) was competitive with Mg2+. Neomycin was an inhibitor at 10-6-10-4M concn., but only in the absence of Triton X-100. I was inhibited by Hb at concns. >1% wt./vol. and by SH-group **reagents**, but was unaffected by dithioerythritol and F-.

L25 ANSWER 24 OF 31 CAPLUS COPYRIGHT 2001 ACS
ACCESSION NUMBER: 1981:582885 CAPLUS
DOCUMENT NUMBER: 95:182885
TITLE: Characterization of neuraminidase in leukocytes with ammonium (4-methylumbelliferyl-.alpha.-D-N-acetylneuraminate)
AUTHOR(S): Sudo, Masakatsu; Momoi, Toru; Shigematsu, Yosuke; Kobatake, Hiroshi
CORPORATE SOURCE: Fukui Med. Sch., 910-11, Japan
SOURCE: Shonika Kiyo (1981), 27(2), 76-82
CODEN: SHKIAH; ISSN: 0003-4495
DOCUMENT TYPE: Journal

LANGUAGE: Japanese

AB The kinetic properties of neuraminidase (I) of human leukocytes were examd. with the synthetic fluorogenic substrate ammonium (4-methyl-umbelliferyl-.alpha.-D-N-acetylneuraminate). I had pH optimum of 3.8-4.0 and a Km of 0.125 mM. It was unstable at 37.degree. and its activity was inhibited by isotonic concn. of NaCl, **KCl**, CaCl2, and MgCl2 and by **detergents**. Normal values for I activity in **leukocytes** were **detd**.

L25 ANSWER 25 OF 31 CAPLUS COPYRIGHT 2001 ACS
ACCESSION NUMBER: 1980:634561 CAPLUS
DOCUMENT NUMBER: 93:234561
TITLE: Reagent and method for the reduction of scattered light in photometric measurements of hemoglobin
INVENTOR(S): Frey, Raymond
PATENT ASSIGNEE(S): Contraves A.-G., Switz.
SOURCE: Eur. Pat. Appl., 10 pp.
CODEN: EPXXDW
DOCUMENT TYPE: Patent
LANGUAGE: German
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 10577	A1	19800514	EP 1979-102800	19790803
EP 10577	B1	19811111		
R: AT, BE, CH, DE, FR, GB, IT, LU, NL, SE				
AT 390	E	19811115	AT 1979-102800	19790803
NO 7902820	A	19800505	NO 1979-2820	19790830
US 4290772	A	19810922	US 1979-80188	19791001
JP 55063760	A2	19800514	JP 1979-139427	19791030
DK 7904594	A	19800502	DK 1979-4594	19791031
AU 7952364	A1	19800508	AU 1979-52364	19791031
AU 522105	B2	19820513		

PRIORITY APPLN. INFO.: CH 1978-11239 19781101
EP 1979-102800 19790803

AB **Hb** and the **leukocyte** no. are **detd**. simultaneously in a blood sample by addn. to the sample of a **reagent** contg. 5-10 g **trimethyltetradecylammonium bromide** (which lyses the erythrocytes), 240-350 mL HCHO (which stabilizes the leukocytes), 20-35 g actylphenol decaethylene glycol ether, and isotonic NaCl to 1L. One part **reagent** is added to 99 parts blood sample. The octylphenol decaethylene glycol ether adjusts the n of the soln. to equal that of lysed erythrocytes and prevents error in the nephelometric **detn**.

of **l ukocyte** no. by removing light scattering by erythrocyte fragments.

L25 ANSWER 26 OF 31 CAPLUS COPYRIGHT 2001 ACS
ACCESSION NUMBER: 1979:164335 CAPLUS
DOCUMENT NUMBER: 90:164335
TITLE: Apparatus for treatment of a solution for insertion into an analytical optical device
INVENTOR(S): Frank, Georg
PATENT ASSIGNEE(S): Bayer A.-G., Ger.
SOURCE: Ger. Offen., 42 pp.
CODEN: GWXXBX
DOCUMENT TYPE: Patent
LANGUAGE: German
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
DE 2721942	A1	19781123	DE 1977-2721942	19770514
DE 2721942	B2	19790607		
DE 2721942	C3	19800207		
CH 637216	A	19830715	CH 1978-5096	19780510
SE 7805408	A	19781115	SE 1978-5408	19780511
AU 7836008	A1	19791115	AU 1978-36008	19780511
AU 514940	B2	19810305		
BE 866993	A1	19781113	BE 1978-56973	19780512
NL 7805189	A	19781116	NL 1978-5189	19780512
NL 190427	B	19930916		
NL 190427	C	19940216		
FR 2390724	A1	19781208	FR 1978-14330	19780512
FR 2390724	B1	19831230		
JP 53141688	A2	19781209	JP 1978-55743	19780512
JP 60027375	B4	19850628		
ES 469792	A1	19781216	ES 1978-469792	19780512
BR 7803016	A	19790102	BR 1978-3016	19780512
GB 1582224	A	19810107	GB 1978-19197	19780512
AT 7803485	A	19821015	AT 1978-3485	19780512
AT 371253	B	19830610		

PRIORITY APPLN. INFO.: DE 1977-2721942 19770514

AB A cuvette is described for carrying out clin. tests on biol. fluids by spectrometry. The cuvette, which contains a buffer soln. and **reagents** for carrying out the clin. test, is sealed to prevent evapn. and contamination. The biol. fluid is introduced into the cuvette via a short length of capillary tubing, and a 2nd tube contg. a dry **reagent** necessary for the reaction then is introduced. The cuvette is shaken, and the color formed is measured with a spectrometer. In an example, the cuvette was used

to **det.** **Hb** in a biol. sample. The cuvette contained 1.25 mL of a soln. contg. 0.6M K3Fe(CN)6, 2.5M phosphate buffer, pH 6.8-7.2, 1.5M NaCl, and 0.5% **detergent**. A blood sample was taken up in a short capillary tube and added to the cuvette along with another tube contg. 70 .mu.g KCN. The color was measured at 540 or 546 nm.

L25 ANSWER 27 OF 31 CAPLUS COPYRIGHT 2001 ACS
ACCESSION NUMBER: 1977:27437 CAPLUS
DOCUMENT NUMBER: 86:27437
TITLE: A new reagent for the cyanmethemoglobin method
AUTHOR(S): Matsubara, Takakata; Kanagawa, Hiroshi; Okuzono, Hiroshi; Tamagawa, Shosuke; Hattori, Shotaro
CORPORATE SOURCE: Med. Sch. Hosp., Kumamoto Univ., Kumamoto, Japan
SOURCE: Igaku To Seibutsugaku (1976), 92(4), 273-7
CODEN: IGSBAL
DOCUMENT TYPE: Journal
LANGUAGE: Japanese
AB A new **reagent** for the cyanmethemoglobin method of **Hb detn.**, contg. 200 mg of K ferricyanide, 50 mg of KCN and 1.0 ml of non-ionic **detergent**/l. of 0.033 M phosphate buffer, was developed. It lacks the defects of the older **reagent** which sometimes gives turbidity with patient's blood or changes pH values during storage.

L25 ANSWER 28 OF 31 CAPLUS COPYRIGHT 2001 ACS
ACCESSION NUMBER: 1976:116456 CAPLUS
DOCUMENT NUMBER: 84:116456
TITLE: Erythrocyte porphyrin analysis in the detection of lead poisoning in children: evaluation of four micromethods
AUTHOR(S): Hanna, Thomas L.; Dietzler, David N.; Smith, Carl H.; Gupta, Santosh; Zarkowsky, Harold S.
CORPORATE SOURCE: Sch. Med., Washington Univ., St. Louis, Mo., USA
SOURCE: Clin. Chem. (Winston-Salem, N. C.) (1976), 22(2), 161-8
CODEN: CLCHAU
DOCUMENT TYPE: Journal
LANGUAGE: English
AB Of the 4 fluorometric micromethods for **detg.** **erythrocyte** porphyrins, the method using a single extn. with ethanol appears to be best suited for detection of lead poisoning in children. The method using double extn. with ethyl acetate/acetic acid - **HCl** gave complete recovery of porphyrin but was more complex than the ethanol method. The method using a single extn. with acetone gave low and variable recovery of porphyrin, and the method using direct solubilization with **detergent** -buffer was subject to serious Hb interference. Coproporphyrin

appears to be useful as a std. A procedure for expressing the results in terms of erythrocyte Zn-protoporphyrin is given.

L25 ANSWER 29 OF 31 CAPLUS COPYRIGHT 2001 ACS
ACCESSION NUMBER: 1970:452925 CAPLUS
DOCUMENT NUMBER: 73:52925
TITLE: Rapid cyanmethemoglobin estimation
AUTHOR(S): Munkley, R. M.; Stuart, John
CORPORATE SOURCE: Dep. Haematol., Child. Hosp., Birmingham, Engl.
SOURCE: J. Clin. Pathol. (1970), 23(2), 190
CODEN: JCPAAK
DOCUMENT TYPE: Journal
LANGUAGE: English
AB Two neutral and 2 cyanide-ferricyanide solns., each com. available for the **detn.** of whole blood **Hb** vs. cyanmethemoglobin were studied with regard to the rate of conversion of Hb to cyanmethemoglobin. Each of the alk. solns. gave stable values at 15 min., and the time was not shortened by addn. of a **detergent** to one of them to promote red cell lysis. Only 1 of the 2 neutral solns. conformed to recommendations of the International Committee for Standardization in Hematol. that the working pH be in the range 7.0-7.4; this prepn. consistently gave a pH of 7.0. Stable Hb values were obtained within 5 min. The value at 1 min gave a false low mean error of only 0.05 g/100 ml. Strict precautions were taken to exclude light from the working soln. This **reagent** can be recommended for outpatient and emergency use, reliable data being obtained at 1 min if light is excluded from the working soln. Different lots of the other neutral prepn., marketed in dry form, when reconstituted with H2O gave pH values of 7.7 and 8.2, or 7.3 if fresh.

L25 ANSWER 30 OF 31 CAPLUS COPYRIGHT 2001 ACS
ACCESSION NUMBER: 1967:73154 CAPLUS
DOCUMENT NUMBER: 66:73154
TITLE: Microdetermination of methemoglobin
AUTHOR(S): Passannante, Anthony J.; Gerarde, Horace W.
CORPORATE SOURCE: Becton, Dickinson and Co., Rutherford, N. J., USA
SOURCE: J. Occup. Med. (1966), 8(9), 455-9
CODEN: JOCMA7
DOCUMENT TYPE: Journal
LANGUAGE: English
AB To **det.** total **Hb**, add 10 .mu.l. fresh or anticoagulated blood to 2.5 ml. Drabkin **reagent**, mix, allow to stand 10 min., and det. absorbance at 540 m.mu.. **Det. Hb** concn. by reference to a standard curve prepd. from com. cyanomethemoglobin standards. To standardize methemoglobin (MetHb) add 25 .mu.l. fresh or anticoagulated blood to

2.5 ml. tergitol-borate buffer (0.255 g. Na2B4O7.10H2O + 3.3 ml. tergitol nonionic NPX **detergent**/l.). Add 1.3 mg. K3Fe(CN)6, mix, allow to stand 10 min., and det. absorbance (A1) at 620 m.mu.. Then add 1.3 mg. KCN, mix, allow to stand 2 min., and det. absorbance (A2) at 620 m.mu.. Calc. K = Hb (g./100 ml.)/(A1-A2). To det. MetHb, add 25 .mu.l. blood, mix, allow to stand 10 min., and measure absorbance (A3) at 620 m.mu.. Add 1.3 mg. KCN, mix, allow to stand 2 min. and again det. absorbance (A4) at 620 m.mu.. Calc. MetHb (g./100 ml.) = K (A3-A4) or percent MetHb = MetHb .times. 100/total Hb. The method uses prepackaged **reagents** and standardized app. K varies slightly with MetHb concn.

L25 ANSWER 31 OF 31 CAPLUS COPYRIGHT 2001 ACS
ACCESSION NUMBER: 1967:9673 CAPLUS
DOCUMENT NUMBER: 66:9673
TITLE: Erythrocyte membrane stabilization by local anesthetic and tranquilizers
AUTHOR(S): Seeman, Philip
CORPORATE SOURCE: Rockefeller Univ., New York, N. Y., USA
SOURCE: Biochem. Pharmacol. (1966), 15(11), 1753-66
CODEN: BCPCA6
DOCUMENT TYPE: Journal
LANGUAGE: English
AB Low concns. of the local anesthetics dibucaine-**HCl** and tetracaine-**HCl** protect or stabilize human erythrocytes against hypotonic hemolysis; higher concns. elicit a **detergent** hemolysis. Lidocaine-**HCl** and procaine-**HCl** also cause these biphasic effects but at higher extracellular pH values. Increasing the extracellular pH enhances the membrane-stabilizing and lytic potencies of these local anesthetics as well as those of the phenothiazine tranquilizers. Decreasing the intracellular pH also enhances the stabilizing and lytic potencies of these tertiary amines. **Measurements** of the circumferences of the **erythrocyte** profiles from electron micrographs indicate that 1.4 .times. 10-5M prochlorperazine induces a membrane expansion of .apprx.19%. This expansion is compatible with an intramembrane location of the 108 mols./cell that is known to occur (from adsorption studies). 35 references.

(FILE 'MEDLINE, BIOSIS, EMBASE, WPIDS, CONFSCI, SCISEARCH, JICST-EPLUS, JAPIO' ENTERED AT 12:14:37 ON 13 JUL 2001)
L26 40 S L25
L27 30 DUP REM L26 (10 DUPLICATES REMOVED)

L27 ANSWER 1 OF 30 BIOSIS COPYRIGHT 2001 BIOSIS
ACCESSION NUMBER: 2001:197579 BIOSIS

DOCUMENT NUMBER: PREV200100197579
TITLE: Reagent for measurement of the haemoglobin and determination of the leukocytes in a blood sample.
AUTHOR(S): Veriac, Sylvie (1); Champseix, Henri
CORPORATE SOURCE: (1) Montpellier France
ASSIGNEE: ABX, Montpellier, France
PATENT INFORMATION: US 6114130 September 05, 2000
SOURCE: Official Gazette of the United States Patent and Trademark Office Patents, (Sep. 5, 2000) Vol. 1238, No. 1, pp. No Pagination. e-file.
ISSN: 0098-1133.
DOCUMENT TYPE: Patent
LANGUAGE: English

AB A **reagent** for **measurement** of the **haemoglobin** and **determination** of the **leukocytes** in a blood sample is provided. This **reagent** comprises at least one **detergent** of the cationic type; a compound of the glycoside type, and in particular a saponin; at least one inorganic salt and/or an osmotic and/or leukoprotective agent; and an organic and/or inorganic buffer which can adjust the pH of the agent selectively, either to a substantially neutral value, e.g. pH between 5 and 8, or to a basic value, e.g. pH between 8 and 12. The **reagent** can be used in haematological analyses in human and veterinary medicine.

L27 ANSWER 2 OF 30 WPIDS COPYRIGHT 2001 DERWENT INFORMATION LTD
ACCESSION NUMBER: 2000-595651 [57] WPIDS
DOC. NO. NON-CPI: N2000-441205
DOC. NO. CPI: C2000-178086
TITLE: Reagent for determining leucocytes and hemoglobin content, particularly useful in diagnosis of e.g. allergy, allows selective determination of the polynuclear basophil content.
DERWENT CLASS: B04 S03
INVENTOR(S): CHAMPSEIX, H; VERIAC, S
PATENT ASSIGNEE(S): (ABXA-N) ABX; (ABXA-N) ABX SA
COUNTRY COUNT: 27
PATENT INFORMATION:

PATENT NO	KIND	DATE	WEEK	LA	PG
EP 1039297	A1	20000927	(200057)*	FR	11
R: AL AT BE CH CY DE DK ES FI FR GB GR IE IT LI LT LU LV MC MK NL PT RO SE SI					
FR 2791138	A1	20000922	(200057)		
NO 2000001419	A	20000920	(200057)		
JP 2000275242	A	20001006	(200065)		6

APPLICATION DETAILS:

PATENT NO	KIND	APPLICATION	DATE
EP 1039297	A1	EP 2000-400670	20000310
FR 2791138	A1	FR 1999-3467	19990319
NO 2000001419	A	NO 2000-1419	20000317
JP 2000275242	A	JP 2000-77711	20000321

PRIORITY APPLN. INFO: FR 1999-3467 19990319
AN 2000-595651 [57] WPIDS
AB EP 1039297 A UPAB: 20001109
NOVELTY - **Reagent** (A) for **determining** (i) the number of **leucocytes** and of polynuclear basophils and (ii) the hemoglobin (Hb) content in a blood sample comprises:
(1) a buffer to provide acidic pH, preferably below 3;
(2) at least one cationic **detergent** (I); and
(3) a nitrogenous compound (II).
USE - (A) is used for diagnostic blood analysis, particularly the proportion of basophils is elevated in cases of allergy, infections (tuberculosis or chickenpox) and metabolic disease (myxoedema or hyperlipidemia).
ADVANTAGE - A single **reagent**, free of cyanide, is used to lyze erythrocytes (for release of Hb, which is then stabilized, as methemoglobin, by(II)) and for **determination** of **leucocytes**. (A) is particularly well suited to use with automated analyzers and the acidic pH allows determination of the basophil subpopulation, since this is more resistant to acid than other types of leucocytes.
Dwg.0/3

L27 ANSWER 3 OF 30 WPIDS COPYRIGHT 2001 DERWENT INFORMATION LTD
ACCESSION NUMBER: 1997-539317 [50] WPIDS
DOC. NO. CPI: C1997-172522
TITLE: Multicomponent circulating cytometric four part reagent system - determines differential blood counts, haemoglobin concentration quantity and size of erythrocyte, thrombocytes and derived parameters.
DERWENT CLASS: A89 B04 J04 S03
INVENTOR(S): FERENCI, L; IMRE, J; NAGY, J
PATENT ASSIGNEE(S): (FERE-I) FERENCI L; (IMRE-I) IMRE J; (NAGY-I) NAGY J
COUNTRY COUNT: 1
PATENT INFORMATION:

PATENT NO	KIND	DATE	WEEK	LA	PG

HU 74914	T	19970328 (199750)*	1

APPLICATION DETAILS:

PATENT NO	KIND	APPLICATION	DATE
HU 74914	T	HU 1994-3779	19941223

PRIORITY APPLN. INFO: HU 1994-3779 19941223
AN 1997-539317 [50] WPIDS
AB HU 74914 T UPAB: 19971217
Multicomponent, circulating, cytometric **reagent** system comprises: (i) a diluent solution; (ii) a lytic/leucoprotective/flow directing **reagent**; (iii) a lytic/haemoglobin **reagent**; and (iv) a cleaning **detergent** solution.
(i) Contains: 5-50 mmol/l buffer; 0.1-200 g/l ionic and/or polar, osmolarity standardising compound; 0.01-3.0 g/l stabiliser; and/or 0.001-4.0 g/l preservative. The solution serves as a diluent for whole blood, for classification based on later diffraction principle of **leucocytes** into five subgroups, for **determination** of the **quantity** and size of **erythrocytes**, thrombocytes, of haemoglobin concentration and derived parameters (as haematocrit, average haemoglobin concentration of corpuscles, and haemoglobin content of corpuscles).
(ii) Contains: 0.001-10. g/l organic and/or inorganic buffer; 0.001-2.0 g/l nonionic and/or ionic **detergent**; and as leucoprotective agent 0.5-20 g/l 1-10C aliphatic alcohols and/or aliphatic and/or aromatic glycol ethers; optionally 0.001-1.5 g/l preservative; and 0.001-1.50 g/l antioxidant. (iii) Contains: 8.0-100 g/l aliphatic and/or aromatic quaternary ammonium compounds and/or 15-100 g/l aromatic cationic surface agents; 0.01-0.80 g/l alkali-cyanide and/or 0.01-2.0 cyanide-emitters chromogenic compound; and optionally 0.01-15.0 g/l alkyl-polyethylene-glycol-ether, 0.01-15.0 g/l alkoxy-polyethylene-glycol-ether, 0.01-15.0 g/l alkyl-aryl-polyethylene-glycol-ether, and/or 0.1-60 g/l inorganic salt. (iv) Contains: 5-50 mol/l buffer; 0.01-20 g/l ionic and/or polar osmolarity standardising compound; 0.01-3/0 g/l stabliser; 0.001-5.0 g/l alkyl-polyethylene-glycol-ether; 0.01-5.0 g/l alkoxy-polyethylene-glycol-ether; 0.01-5.0 g/l alkyl-aryl-polyethylene-glycol ether; and/or 0.0901-4.0 g/l preservative.
Dwg.0/0

L27 ANSWER 4 OF 30 WPIDS COPYRIGHT 2001 DERWENT INFORMATION LTD
ACCESSION NUMBER: 1996-386426 [39] WPIDS
DOC. NO. NON-CPI: N1996-325657
DOC. NO. CPI: C1996-121683

TITLE: Reagents for determining total haemoglobin content - and opt. content of particular haemoglobin deriv. in blood samples, comprise haemolysis reagent and green chromophore-forming reagent.

DERWENT CLASS: A96 B04 D16 S03

INVENTOR(S): BONA, V; VORBERG, E; WITZIGMANN, A

PATENT ASSIGNEE(S): (HOFF) HOFFMANN LA ROCHE & CO AG F

COUNTRY COUNT: 17

PATENT INFORMATION:

PATENT NO	KIND	DATE	WEEK	LA	PG
EP 729031	A1	19960828	(199639)*	EN	10
R: AT BE CH DE DK ES FR GB GR IE IT LI LU NL PT					
CA 2169882	A	19960825	(199651)		
JP 08262027	A	19961011	(199651)		10

APPLICATION DETAILS:

PATENT NO	KIND	APPLICATION	DATE
EP 729031	A1	EP 1996-102222	19960215
CA 2169882	A	CA 1996-2169882	19960220
JP 08262027	A	JP 1996-36873	19960223

PRIORITY APPLN. INFO: EP 1995-102635 19950224

AN 1996-386426 [39] WPIDS

AB EP 729031 A UPAB: 19961004

The following are claimed:

(A) a set of **reagents** for **determining** the content of total **haemoglobin** (**Hb**) in blood samples (or samples derived from blood), comprising:

(a) a haemolysis **reagent** which is an acidic soln. having a pH of 0.5-5.0, esp. 0.5-3.0 and

(b) a green chromophore forming **reagent** which is a basic soln. (having a pH of 7.0-12.0 (esp. 0.9-11.5)) contg. a nonionic **detergent** and/or an ionic **detergent**;

(B) a set of **reagents** for **determining** both the content of total **Hb** and the content of a particular Hb deriv. in a blood sample (or sample derived from blood), comprising:

(a') a haemolysis **reagent** as described above,

(b') a green chromophore forming **reagent** as described above and

(c') a **reagent** for **determining** the content of a particular **Hb** deriv.;

(C) **determining** the content of total **Hb** in a blood sample (or sample derived from blood) comprising:

(a'') treating the sample with a haemolysis **reagent** as described in (A) above and

(b'') incubating the resulting haemolysate with a green chromophore forming **reagent** (as described in (A) above) for a sufficient period of time so as to convert all Hb derivs. into a green chromophore, and measuring the absorbance of the soln. obtd., and

(D) **determining** both the content of total **Hb** and the content of a particular Hb deriv., in a blood sample (or sample derived from blood), comprising:

(a''') treating the sample with a haemolysis **reagent** as described in (A) above,

(b''') incubating an aliquot of the resulting haemolysate with a green chromophore forming **reagent** (as described in (A) above) for a sufficient period of time so as to convert all Hb derivs. into a green chromophore, and measuring the absorbance of the soln. obtd. and

(c''') **determining** the content of the particular **Hb** deriv. in another aliquot of the haemolysate.

USE - The **reagents** are particularly useful for the **determination** of the content of glycated **Hb** derivs. such as HbA1a, HbA1b and HbA1c. The ratio between the content of a particular glycated Hb deriv. and the content of total Hb reflects the average glucose level in blood and is thus a parameter for monitoring metabolic control in diabetes.

ADVANTAGE - The processes allow the **determination** of the content of total **Hb** and the content of a particular Hb deriv. and can thus yield the ratio described under 'use' above.

Dwg.0/2

L27 ANSWER 5 OF 30 WPIDS COPYRIGHT 2001 DERWENT INFORMATION LTD

ACCESSION NUMBER: 1995-403872 [51] WPIDS
DOC. NO. NON-CPI: N1995-292433
DOC. NO. CPI: C1995-173451
TITLE: Improved detection of haemoglobin-advanced glycosylation end prods. - esp. for diagnosis and monitoring of diabetes and ageing.
DERWENT CLASS: A96 B04 S03
INVENTOR(S): BUCALA, R J; CERAMI, A; FOUNDS, H W; YAMIN, M A
PATENT ASSIGNEE(S): (ALTE-N) ALTEON INC
COUNTRY COUNT: 21
PATENT INFORMATION:

PATENT NO	KIND	DATE	WEEK	LA	PG
WO 9530153	A1	19951109	(199551)*	EN	44

RW: AT BE CH DE DK ES FR GB GR IE IT LU MC NL PT SE
W: CA JP MX

EP 757795 A1 19970212 (199712) EN
R: AT BE CH DE DK ES FR GB GR IE IT LI LU MC NL PT SE
US 5610076 A 19970311 (199716) 14
JP 10504640 W 19980506 (199828) 34
EP 757795 B1 19990707 (199931) EN
R: AT BE CH DE DK ES FR GB GR IE IT LI LU MC NL PT SE
DE 69510668 E 19990812 (199938)

APPLICATION DETAILS:

PATENT NO	KIND	APPLICATION	DATE
WO 9530153	A1	WO 1995-US5301	19950428
EP 757795	A1	EP 1995-917751	19950428
		WO 1995-US5301	19950428
US 5610076	A	US 1994-236416	19940429
JP 10504640	W	JP 1995-528418	19950428
		WO 1995-US5301	19950428
EP 757795	B1	EP 1995-917751	19950428
		WO 1995-US5301	19950428
DE 69510668	E	DE 1995-610668	19950428
		EP 1995-917751	19950428
		WO 1995-US5301	19950428

FILING DETAILS:

PATENT NO	KIND		PATENT NO
EP 757795	A1	Based on	WO 9530153
JP 10504640	W	Based on	WO 9530153
EP 757795	B1	Based on	WO 9530153
DE 69510668	E	Based on	EP 757795
		Based on	WO 9530153

PRIORITY APPLN. INFO: US 1994-236416 19940429
AN 1995-403872 [51] WPIDS
AB WO 9530153 A UPAB: 19951221
Detection of the presence of **haemoglobin**-AGE (advanced glycosylation end prods.) (I) in a sample comprises: (a) diluting the sample in a dilution buffer which comprises an anionic protein denaturing **detergent** (II) at a concn. sufficient to denature (I); (b) contacting the diluted sample with means for detecting the presence of (I) in the sample, and (c) detecting the presence of (I) in the sample. Also claimed are: (A) a dilution buffer comprising: (i) (II) at a concn. sufficient to denature (I) without interfering in binding of **reagents** with (I); (ii) a non-ionic surfactant (III) at a concn. sufficient to facilitate detection of (I); and (iii) a denaturing agent at a concn.

sufficient to denature (I) and increase assay sensitivity, without denaturing binding of **reagents** in (I); (B) a method in which the diluent buffer comprises: (1) sodium dodecylsulphate at a concn. of 0.04-0.16% (w/v); (2) Triton X-100 polyoxyethylene ester at a concn. of 0.005-0.1% (w/v); (3) urea at a concn. of 0.5-3M; and (C) a kit for carrying out the methods as above.

USE - The method is useful for the diagnosis and monitoring of diseases and disorders associated with AGE formation, such as diabetes and the ageing process. The method is esp. useful to detect the ''aminoguanidine effect'', which is the decrease in the level of (I) in a sample from a subject undergoing therapy with the AGE-inhibitor aminoguanidine.

ADVANTAGE - The dilution buffer increases the speed, ease and simplicity of assays for (I) and enhances its immuno-detection.

Dwg.1/3

ABEQ US 5610076 A UPAB: 19970417

A method for detecting the presence of haemoglobin-advanced glylosylation end-products, haemoglobin-AGE, in a sample comprising:

a) diluting the sample in a dilution buffer, which dilution buffer comprises sodium dodecyl sulphate at a concentration sufficient to denature haemoglobin-AGE;

b) contacting the diluted sample with a binding partner of an AGE; and

c) detecting the presence of haemoglobin-AGE in the sample by detecting binding of the binding partner of an AGE to haemoglobin-AGE.

Dwg.0/3

L27 ANSWER 6 OF 30 EMBASE COPYRIGHT 2001 ELSEVIER SCI. B.V.

ACCESSION NUMBER: 96025889 EMBASE

DOCUMENT NUMBER: 1996025889

TITLE: [Mathematical correction of haemoglobin interference in the determination of iron (II + III) serum concentration].
CORRECCION MATEMATICA DE LA INTERFERENCIA POR LA HEMOGLOBINA EN LA DETERMINACION DE LA CONCENTRACION SERICA DE HIERRO (II + III).

AUTHOR: Cardenas Fernandez M.C.; Bonilla I.; Perez R.; Diez S.; Torrejon M.J.; Barbera G.

CORPORATE SOURCE: Ct. de Especialidades, Servicio de Analisis Clinicos, Avda. Portugal, 155,28011 Madrid, Spain

SOURCE: Revista de la Sociedad Espanola de Quimica Clinica, (1995) 14/6 (373-376).
ISSN: 0213-8514 CODEN: RSQCEV

COUNTRY: Spain

DOCUMENT TYPE: Journal; Article

FILE SEGMENT: 029 Clinical Biochemistry

LANGUAGE: Spanish

SUMMARY LANGUAGE: Spanish; English

AB Hemoglobin causes interference in iron (II + III) determination. To avoid that, it is necessary to obtain a non hemolyzed sample or to take into account that interference prior to result interpretation. The aim of this paper is the characterization and inference of mathematical correction of **hemoglobin** interference in the **determination** of iron (II + III) serum concentration as measured by the Ferrozine method without deproteinization, using two **reagents** with and without **detergent** in their composition. We found a clinically significant interference using both reactives. In the case of the **reagent** without **detergent** the interference was dependent of the concentrations of both iron (II + III) and hemoglobin. The interference was positive or negative depending upon hemoglobin concentration. The interference was positive and iron (II + III) concentration independent in the case of the **reagent** with **detergent**. This correction applied to patients samples provided good results. We conclude that mathematical correction can be used for iron (II + III) determination in hemolyzed samples, where a clinically significant interference exits and to obtain a new sample is difficult.

L27 ANSWER 7 OF 30 WPIDS COPYRIGHT 2001 DERWENT INFORMATION LTD
ACCESSION NUMBER: 1993-282028 [36] WPIDS
DOC. NO. NON-CPI: N1993-216696
DOC. NO. CPI: C1993-125843
TITLE: Immunological **determn**. of **haemoglobin** derivs. - after treating blood sample with haemolytic **reagent** contg. ionic **detergent**.
DERWENT CLASS: B04 S03
INVENTOR(S): KARL, J; KERSCHER, L; SCHNEIDER, E; JOHANN, K
PATENT ASSIGNEE(S): (BOEF) BOEHRINGER MANNHEIM GMBH; (HOFF) ROCHE DIAGNOSTICS GMBH
COUNTRY COUNT: 28
PATENT INFORMATION:

PATENT NO	KIND	DATE	WEEK	LA	PG
EP 559164	A2	19930908	(199336)*	GE	20
R: AT BE CH DE DK ES FR GB GR IE IT LI LU NL PT SE					
DE 4206932	A1	19930909	(199337)		19
AU 9333871	A	19930916	(199344)		
NO 9300770	A	19930906	(199344)		
FI 9300975	A	19930906	(199347)		
CA 2090981	A	19930906	(199348)		
JP 06011510	A	19940121	(199408)		11
SK 9300149	A3	19931006	(199420)		

CZ 9300291	A3	19940119	(199424)	
AU 652092	B	19940811	(199435)	
ZA 9301533	A	19941130	(199502)	38
NZ 247054	A	19950224	(199513)	
EP 559164	A3	19940126	(199517)	
CN 1081765	A	19940209	(199522)	
US 5541117	A	19960730	(199636)	14
HU 70463	T	19951030	(199732)	
JP 2637677	B2	19970806	(199736)	11
CA 2090981	C	19991116	(200014)	EN
EP 559164	B1	20000524	(200030)	GE
R: AT BE CH DE DK ES FR GB GR IE IT LI LU NL PT SE				
DE 59310046	G	20000629	(200036)	
ES 2148190	T3	20001016	(200058)	

APPLICATION DETAILS:

PATENT NO	KIND	APPLICATION	DATE
EP 559164	A2	EP 1993-103349	19930303
DE 4206932	A1	DE 1992-4206932	19920305
AU 9333871	A	AU 1993-33871	19930301
NO 9300770	A	NO 1993-770	19930303
FI 9300975	A	FI 1993-975	19930304
CA 2090981	A	CA 1993-2090981	19930304
JP 06011510	A	JP 1993-45130	19930305
SK 9300149	A3	SK 1993-149	19930301
CZ 9300291	A3	CZ 1993-291	19930226
AU 652092	B	AU 1993-33871	19930301
ZA 9301533	A	ZA 1993-1533	19930304
NZ 247054	A	NZ 1993-247054	19930303
EP 559164	A3	EP 1993-103349	19930303
CN 1081765	A	CN 1993-104037	19930304
US 5541117	A	US 1993-26464	19930304
HU 70463	T	HU 1993-596	19930304
JP 2637677	B2	JP 1993-45130	19930305
CA 2090981	C	CA 1993-2090981	19930304
EP 559164	B1	EP 1993-103349	19930303
DE 59310046	G	DE 1993-510046	19930303
		EP 1993-103349	19930303
ES 2148190	T3	EP 1993-103349	19930303

FILING DETAILS:

PATENT NO	KIND		PATENT NO
AU 652092	B	Previous Publ.	AU 9333871
JP 2637677	B2	Previous Publ.	JP 06011510

DE 59310046 G Based on EP 559164
ES 2148190 T3 Based on EP 559164

PRIORITY APPLN. INFO: DE 1992-4206932 19920305
AN 1993-282028 [36] WPIDS
AB EP 559164 A UPAB: 19990416
Quantitative determn. of a **haemoglobin** deriv. (I) in a blood sample is effected by: (a) treating the sample with a haemolytic **reagent** (II) having a pH of 5-9.5 and contg. an ionic **detergent**; and (b) immunologically determining (I) in the haemolysate. Also claimed is a method for **quantitative determn.** of (I) and total **haemoglobin** in a blood sample, comprising: (a) treating the sample with a haemolytic **reagent** contg. an ionic **detergent** with a pH of 5-9.5; (b) **determining** the total **haemoglobin** content of the haemolysate; and (c) immunologically determining (I) in the haemolysate.
USE/ADVANTAGE - The method is esp. useful for **determining** the glycosylated **haemoglobin** deriv. HbAc, e.g. for diagnosis of diabetes. Haemolysis may be effected at low temps. in short times without the use of toxic **reagents** such as cyanide. **Determn.** of (I) and total **haemoglobin** may be effected using a single haemolysis step.
Dwg.1/8
ABEQ DE 4206932 A UPAB: 19931123
Quantitative determn. of a **haemoglobin** deriv. (I) in a blood sample is effected by: (a) treating the sample with a haemolytic **reagent** (II) having a pH of 5-9.5 and contg. an ionic **detergent**; and (b) immunologically determining (I) in the haemolysate. Also claimed is a method for **quantitative determn.** of (I) and total **haemoglobin** in a blood sample, comprising: (a) treating the sample with a haemolytic **reagent** contg. an ionic **detergent** with a pH of 5-9.5; (b) **determining** the total **haemoglobin** content of the haemolysate; and (c) immunologically determining (I) in the haemolysate.
USE/ADVANTAGE - The method is esp. useful for **determining** the glycosylated **haemoglobin** deriv. HbAc, e.g. for diagnosis of diabetes. Haemolysis may be effected at low temps. in short times without the use of toxic **reagents** such as cyanide. **Determn.** of (I) and total **haemoglobin** may be effected using a single haemolysis step.
21
Dwg.4/8
ABEQ US 5541117 A UPAB: 19960913
Method for immunologically **determining** glycated **haemoglobin** in blood, comprising:
(a) treating a blood sample which contains said glycated

haemoglobin with a haemolysis **reagent** consisting essentially of an ionic **detergent** which has a pH of from 5.5 to 9.5, for a period of no more than 10 minutes, at a temperature of from 4deg. C. to 37deg. C., to haemolyse said blood sample,

(b) contacting the haemolysed blood sample with at least one immune **reagent** which specifically binds to glycated haemoglobin, and

(c) determining binding of said immune **reagent** as a **determination** of glycated **haemoglobin** in said blood sample.

Dwg.0/8

L27 ANSWER 8 OF 30 WPIDS COPYRIGHT 2001 DERWENT INFORMATION LTD
ACCESSION NUMBER: 1993-165672 [20] WPIDS
DOC. NO. NON-CPI: N1993-126756
DOC. NO. CPI: C1993-073998
TITLE: Determining damage to erythrocyte membranes - caused by X-ray irradiation involves incubation in specified isotonic medium and determining activity of nucleotidase and ATP-ase.
DERWENT CLASS: B04 D16 S03
INVENTOR(S): BUSHNEVA, I A; TSOKUR, E V; TSVETKOVA, T V
PATENT ASSIGNEE(S): (AKZO-R) AS KAZA ZOOLOGY INST
COUNTRY COUNT: 1
PATENT INFORMATION:

PATENT NO	KIND	DATE	WEEK	LA	PG
SU 1735777	A1	19920523	(199320)*		2

APPLICATION DETAILS:

PATENT NO	KIND	APPLICATION	DATE
SU 1735777	A1	SU 1989-4775808	19891229

PRIORITY APPLN. INFO: SU 1989-4775808 19891229
AN 1993-165672 [20] WPIDS
AB SU 1735777 A UPAB: 19931113
The method comprises taking a sample of blood, sepn. of erythrocytes, washing and incubation in isotonic medium contg. 2 mM ATP, 2 mM Mg(2+) and 50 mM tris-**HCl** at pH 7.5 to determine ATP-ase, and 2 mM AMP, 30 mM Mg(2+) and 145.0 mM tris-**HCl** at pH 8.6 to determine 5'-nucleotidase. The activity of enzymes is determined from the yield of inorganic phosphate generated by 1 million of cells during 1 hr. of incubation. Quantitative determn.

of sepd. inorganic phosphate is conducted by the known method, using a soln. of ammonium molybdate and tin chloride. The colour develops at room temp. after 20 min. and remains stable. The activity of enzymes, localised on external membrane, undergoes a rapid increase 3 hrs. after irradiation, and reaches 186% of its starting level for 5'-nucleotidase and 196% of the initial level for ATP-ase.

Clinical tests confirm accuracy of analysis. The method allows to **determine** damage to **erythrocyte** membranes early after irradiation, is simple, does not require special equipment. Native erythrocytes can be used instead of erythrocytes pretreated with **detergents** used in the known method.

USE/ADVANTAGE - In biochemistry and clinical haematology, for **determn**. of damage to **erythrocyte** membranes, caused by X-ray irradiation. The method offers simplified technology owing to reduced number of stages and operations. Bul.19/23.5.92 Dwg. 0/0

L27 ANSWER 9 OF 30 WPIDS COPYRIGHT 2001 DERWENT INFORMATION LTD
ACCESSION NUMBER: 1992-121334 [01] WPIDS
TITLE: Colorimetric glyco-haemoglobin test - in which haemolysate from washed erythrocyte is incubated in strongly alkaline detergent soln. to form alkaline hematin etc..
DERWENT CLASS: B04 S03
PATENT ASSIGNEE(S): (HOFF) HOFFMANN LA ROCHE CO LTD F
COUNTRY COUNT: 1
PATENT INFORMATION:

PATENT NO	KIND	DATE	WEEK	LA	PG
RD 335068	A	19920310	(199301)*		

PRIORITY APPLN. INFO: RD 1992-335068 19920220
AN 1992-121334 [01] WPIDS
AB RD 335068 A UPAB: 19931006
A **reagent** was developed for the colorimetric determination of glycohemoglobin, more precisely the fraction of **hemoglobin** glycation. The assay comprises two **determinations**, one for total **hemoglobin** and one for glycohemoglobin. These may be performed in two separate cuvettes or consecutively in a single cuvette. The glycohemoglobin fraction is calculated from the quotient of the individual results. For the **determination** of total **hemoglobin** a haemolysate from washed erythrocytes is incubated in strongly alkaline **detergent** solution to form alkaline hematin. The absorbence at the reaction endpoint is proportional to the concentration of

hemoglobin, which may be calculated by means of a factor or by calibration with a suitable calibrator. Instead of the absorbence the absorbence change may also be used for this determination. After the first reaction is terminated a tetrazolium salt, e.g. nitrotetrazolium blue, is added for the **determination** of glycated **hemoglobin**. The tetrazolium salt is reduced to (di)formazan with a rate in proportion to the glycohemoglobin concentration. Interference by thio groups is prevented by alkylation, preferentially by iodoacetamide. The reaction rate may be determined by at least two absorbence readings taken at different reaction times, one of which may be before the addition of the tetrazolium salt. The concentration of glycated hemoglobin may be calculated from the reaction rate of a suitable calibrator. Haemolysate from whole blood may be used as a sample instead of haemolysate from washed erythrocytes. The result then reflects the glycation of whole blood proteins, which may also be used as an index of glycemia.*
1,2/2

L27 ANSWER 10 OF 30 MEDLINE DUPLICATE 1
ACCESSION NUMBER: 89292963 MEDLINE
DOCUMENT NUMBER: 89292963 PubMed ID: 2738519
TITLE: Observations on the alkaline haematin/detergent complex proposed for measuring haemoglobin concentration.
AUTHOR: van Assendelft O W; Zijlstra W G
CORPORATE SOURCE: Division of Host Factors, Centers for Disease Control, Atlanta, GA.
SOURCE: JOURNAL OF CLINICAL CHEMISTRY AND CLINICAL BIOCHEMISTRY, (1989 Apr) 27 (4) 191-5.
Journal code: I3U; 7701860. ISSN: 0340-076X.
PUB. COUNTRY: GERMANY, WEST: Germany, Federal Republic of
Journal; Article; (JOURNAL ARTICLE)
LANGUAGE: English
FILE SEGMENT: Priority Journals
ENTRY MONTH: 198908
ENTRY DATE: Entered STN: 19900309
Last Updated on STN: 19900309
Entered Medline: 19890803

AB The "alkaline haematin D-575" method for **determining haemoglobin**, described by Zander et al. [1984) Clin. Chim. Acta 136, 83-93) was tested. Claims that different non-ionic **detergents** in the **reagent** result in identical values for the **haemoglobin** concentration being **measured** could not be verified. It could also not be verified that a stable end-product with unique spectral characteristics is always reached within approximately 2 min and that conversion of fetal haemoglobin is faster than that with the

haemiglobin cyanide method. Because of the many questions regarding the nature and characteristics of the alkaline haematin/ **detergent** complex or complexes, it is not yet possible to recommend this method for routine haemoglobinometry.

L27 ANSWER 11 OF 30 MEDLINE DUPLICATE 2
ACCESSION NUMBER: 86131670 MEDLINE
DOCUMENT NUMBER: 86131670 PubMed ID: 3081029
TITLE: Calcium enhances the hemolytic action of bile salts.
AUTHOR: Child P; Rafter J
SOURCE: BIOCHIMICA ET BIOPHYSICA ACTA, (1986 Mar 13) 855 (3) 357-64.
Journal code: A0W; 0217513. ISSN: 0006-3002.
PUB. COUNTRY: Netherlands
Journal; Article; (JOURNAL ARTICLE)
LANGUAGE: English
FILE SEGMENT: Priority Journals
ENTRY MONTH: 198604
ENTRY DATE: Entered STN: 19900321
Last Updated on STN: 19900321
Entered Medline: 19860418

AB The lysis of human erythrocytes by bile salts in buffer containing isotonic saline was dramatically enhanced by the addition of 5-10 mM calcium chloride. All bile acids tested showed this effect, with a marked increase in lysis occurring at 0.75 mM for deoxycholate, 1 mM for chenodeoxycholate, 2.5 mM for ursodeoxycholate and 5.5 mM with cholate in the presence of 10 mM calcium chloride. The effect appeared to be specific for calcium; strontium chloride and magnesium chloride gave no stimulatory effect. The increased lysis of the erythrocytes in the presence of 1 mM deoxycholate and 1-10 mM calcium chloride was not associated with increased uptake of the bile salt by the cells (**measured** with [14C]deoxycholate). Using **erythrocytes** previously labelled with [3H]cholesterol, there was no evidence of an enhanced removal of that membrane component in the presence of calcium and deoxycholate, compared to deoxycholate alone. The sensitivity of the cells to the effect of calcium in the presence of 1 mM deoxycholate increased with the length of time of their storage at 4 degrees C. The sensitivity returned to that of fresh cells after incubation at 37 degrees C with 30 mM adenosine plus 25 mM glucose, but this treatment did not further diminish the lysis. Lysis in the presence of 10 mM calcium chloride and 1 mM deoxycholate was partially blocked by increasing the **KCl** concentration at the expense of NaCl. The maximum effect occurred with a buffer comprising 100 mM **KCl**/50 mM NaCl. A more dramatic reduction in the lysis followed the incorporation of the calcium chelator, quin2, into the cells. The lysis induced by 1 mM deoxycholate in the presence of calcium was reduced by 80% in quin-2-loaded cells compared to

controls. The data suggest that bile acids can promote the influx of calcium into erythrocytes, leading to lysis as a result of the efflux of intracellular potassium and/or the uptake of sodium from the incubation medium. The data further suggest that cellular effects may occur at lower bile acid concentrations than that thought to be required for **detergent** damage.

L27 ANSWER 12 OF 30 BIOSIS COPYRIGHT 2001 BIOSIS
ACCESSION NUMBER: 1987:81970 BIOSIS
DOCUMENT NUMBER: BA83:40548
TITLE: OSMOTIC HEMOLYSIS OF HUMAN ERYTHROCYTES THE EFFECTS OF LYSOPHOSPHATIDYLCHOLINE SWELLING RATE AND TEMPERATURE.
AUTHOR(S): ESKELINEN S
CORPORATE SOURCE: DEP. PHYSIOL., UNIV. OULU, OULU, FINLAND.
SOURCE: ACTA UNIV OULUENSIS SER D MED, (1986) 0 (146), 1-76. CODEN: AUODDK. ISSN: 0355-3221.
FILE SEGMENT: BA; OLD
LANGUAGE: English

AB The mechanism of osmotic haemolysis was studied by exposing human erythrocytes to lytic conditions and by employing some factors preventing the lysis. Osmotic swelling, potassium release and haemolysis of erythrocytes were monitored in NaCl, **KCl** and sucrose media with and without a lipid soluble **detergent** lysophosphatidylcholine (LPC) as a function of the ambient osmotic pressure and time at room temperature and at 49-50.degree. C. Methods were developed for studies on osmotic swelling of erythrocytes under a light microscope or scanning electron microscope. Membrane resealing was investigated by **measuring** efflux or radioactive rubidium from **erythrocytes**, and the influence of LPC on colloid osmotic haemolysis after treatment of erythrocytes with nystatin or by incubating them in a NH4Cl solution. At room temperature most cells swelled from a discocyte through an ellipsoid to a sphere, whereas at 49-50.degree. C where the spectrin molecules denature the transition to the spherical form often (7 experiments from 8) involved a stomatocytic (cupped) rather than an ellipsoidal intermediate shape. Hence, the spectrin layer is of importance for the bending properties of the erythrocyte membrane. The shape corresponding to the maximal volume of erythrocytes was a sphere with a volume 1.5-1.6 times larger than that of a discocyte in an isotonic medium, and the cells remained spherical for a short time period before lysing even in water. The membrane injury caused by cell swelling made the membrane permeable either to salt (both influx and efflux) leading to continuous increase in haemolysis in electrolyte media, or to salt and haemoglobin. However, the membrane damage of some cells resealed before haemolysis, causing a transient leak of potassium (salt). The erythrocytes were osmotically more resistant at elevated

temperatures or after gradual swelling when compared to rapid swelling at room temperature, probably due to an increase in the critical volume. A **detergent**, lysophosphatidylcholine (LPC) increased the osmotic resistance after rapid swelling both in hypotonic electrolyte and sucrose media at room temperature and at 49-50.degree. C probably by facilitating sphering and, thus, increasing the critical volume, but without increasing the maximal volume. LPC also suppressed electrolyte influx into swollen and injured cells and prevented continuous increase of haemolysis in electrolyte media. In the presence of a cation ionophore, nystatin, which causes a colloid osmotic lysis of erythrocytes. LPC protected from haemolysis in isotonic or hypotonic NaCl media, but not in NaCl-sucrose mixtures suggesting a closure of sodium channels by LPC.

L27 ANSWER 13 OF 30 WPIDS COPYRIGHT 2001 DERWENT INFORMATION LTD
ACCESSION NUMBER: 1985-137918 [23] WPIDS
DOC. NO. NON-CPI: N1985-103717
DOC. NO. CPI: C1985-060069
TITLE: Blood analysis reagent - contg. tetra decyl-tri methyl ammonium bromide and/or chloride and citric acid as haemolytic agent for counting leucocytes.
DERWENT CLASS: B04 S03
PATENT ASSIGNEE(S): (TOAI-N) TOA IYO DENSHI KK; (TOAM-N) TOA MEDICAL ELECTRONICS CO LTD
COUNTRY COUNT: 2
PATENT INFORMATION:

PATENT NO	KIND	DATE	WEEK	LA	PG
JP 60073356	A	19850425	(198523)*		6
US 4617275	A	19861014	(198644)		
US 4656139	A	19870407	(198716)		
JP 03033230	B	19910516	(199124)		

APPLICATION DETAILS:

PATENT NO	KIND	APPLICATION	DATE
JP 60073356	A	JP 1983-183995	19830929
US 4617275	A	US 1984-653861	19840924
US 4656139	A	US 1986-880049	19860630
JP 03033230	B	JP 1983-183995	19830929

PRIORITY APPLN. INFO: JP 1983-183995 19830929
AN 1985-137918 [23] WPIDS
AB JP 60073356 A UPAB: 19930925

Reagent contains tetradecyltrimethylammonium bromide and/or hexadecyltrimethylammonium chloride, dodecyltrimethylammonium choride and citric acid as hemolytic agent for counting leucocytes.

Reagent consists of combination of (a) a hemolytic agent for counting leucocytes contg. tetradecyltrimethylammonium bromide and/or hexadecyltrimethylammonium chloride, dodecyltrimethylammonium chloride and citric acid and (b) a diluent contg. boric acid system buffer liq., ethylenediaminetetraacetic acid and (2-pyridylthio-1-oxide) sodium.

USE/ADVANTAGE - Useful for prepn. of sample in counting the number of leucocyte by automatic blood analyser. According to the invention, three peak differential classification of eosinophile leucocyte, monocyte, lymphocyte, etc. in leucocyte, which has so far been hardly achieved by previous common analytical operations, can be obtd. and accurate blood cell classification information can be obtd. at low cost.

0/0

ABEQ US 4617275 A UPAB: 19930925

Cells are prepared for blood analysis by a **reagent** contg. dodecyl-Me3 NCl (DMN) as lysing agent for **leukocyte** count **measurement**, citric acid (CA) and tetradecyl-Me3N Br (TMN) and/or hexadecyl-Me3NCl (HMN).

Pref. agents contain (pts.wt.) a) 2.5-3.5 HMN,26-31.5 DMN and 0.01-0.02 CA, b) 1.6-2 HMN,1.6-2 TMN,26-31.5 DMN and 0.01-0.02 CA or c) 3-4 TMN,26-31.5 DMN and 0.01-0.02 CA.

ADVANTAGE - Three peak fractionation in an automatic blood analysis instrument is made possible; a combination of lysing agent and diluent, e.g. boric acid buffer soln,EDTA and (2-pyridylthio-1-oxide)Na can be provided.

ABEQ US 4656139 A UPAB: 19930925

Prepn. of cells for blood analysis comprises dilution of a blood sample with an aq. soln. contg.boric acid buffer, EDTA and sodium pyridine-2-thiol-1-oxide; and addn. of an aq. soln. contg. citric acid, **dodecyltrimethyl ammonium chloride** and tetradecyl **trimethylammonium bromide** and/or hexadecyl **trimethyl**-ammonium chloride, as lysing agents.

USE - The process facilitates fractionation of leucocytes into three peaks in automatic blood analysis instruments.

L27 ANSWER 14 OF 30 WPIDS COPYRIGHT 2001 DERWENT INFORMATION LTD
ACCESSION NUMBER: 1985-250848 [41] WPIDS
DOC. NO. CPI: C1985-108658
TITLE: New chromogenic substrates for enzyme determn. - comprising quinolyl or isoquinolyl ester(s) of amino acids or peptide(s).
DERWENT CLASS: B02 B04 D16
INVENTOR(S): HUGL, H; RUNZHELMER, H V; SCHNABEL, E; WOLFRUM, G
PATENT ASSIGNEE(S): (MILE) MILES LAB INC

COUNTRY COUNT: 12
PATENT INFORMATION:

PATENT NO	KIND	DATE	WEEK	LA	PG
EP 157362	A	19851009	(198541)*	GE	29
R: DE FR GB IT NL SE					
DE 3413078	A	19851024	(198544)		
AU 8540323	A	19851010	(198548)		
JP 60231654	A	19851118	(198601)		
ES 8607243	A	19861101	(198701)		
US 4814271	A	19890321	(198914)		
CA 1272671	A	19900814	(199038)		
JP 06010200	B2	19940209	(199409)		

APPLICATION DETAILS:

PATENT NO	KIND	APPLICATION	DATE
EP 157362	A	EP 1985-103670	19850327
DE 3413078	A	DE 1984-3413078	19840406
JP 60231654	A	JP 1985-70162	19850404
ES 8607243	A	ES 1985-541775	19850329
US 4814271	A	US 1987-83128	19870810
JP 06010200	B2	JP 1985-70162	19850404

FILING DETAILS:

PATENT NO	KIND		PATENT NO
JP 06010200	B2	Based on	JP 60231654

PRIORITY APPLN. INFO: DE 1984-3413078 19840406
AN 1985-250848 [41] WPIDS
AB EP 157362 A UPAB: 19930925
Amino acid or peptide derivs. of formula (I) are new: where the substits. may be attached to any ring C atom; X1 and X2 = N or CH, provided that X1 or X2 is N; R1-R3 = H, 1-6C alkyl, alkoxy or acyl, halogen, CF3, NO2, SO3H, CN, 1-8C acylamino, 1-6C dialkylamino, or 6-10C aryl opt. substd. by 1-6C alkyl, 1-6C alkoxy, halogen, CN, NO2, CF3, SO3H, 1-6C acyl or 1-6C dialkylamino, or R2 + R3 = a fused aromatic (pref. benzene) ring opt. mono- or disubstd. by R1; A = an amino acid or peptide gp.; G = H or a N-protecting gp.
USE - (I) are useful as chromogenic substrates for colorimetric determn. of esterase and/or protease enzymes in body fluids, esp. for detection of leucocytes in urine.
0/7
ABEQ US 4814271 A UPAB: 19930925

New method of determ. esterolytic and proteolytic enzymes comprises (a) contacting test sample with analytical **reagent**, viz. diazonium salt and cpd. of formula (I), one of X1 and X2 is N and the other either N or CH; R1 is H, 1-6C alkyl, -alkoxy, -acyl, halo, CF3, NO2, SO3H, CN, 1-8C acylamine, 6-10C aryl, opt. substd. and R2 and R3 are from same gp. or are fused-on aromatic ring, opt. substd.; A is amino acid or peptide; G is H, N-protective gp. or deriv. and (b) measuring obtd. colouration. G-A is pref. of formula R5-HN-C(R4)H-C(O)- (Ia) where R4 is H, alkyl, cycloalkyl, aralkyl and R5 is H, -CO-alkyl, -aralkyl or -aryl, -SO2-alkyl or -aryl. 0.5-10% accelerator is pref. present, viz. n-decanol, n-dodecanol or n-undecanol, homo-and co-polyamine acids and also opt. buffer and **detergent**.

USE - Simple rapid specific **determn**. of **leucocytes** in urine as diagnostic of renal or urinary tract disease.

L27 ANSWER 15 OF 30 WPIDS COPYRIGHT 2001 DERWENT INFORMATION LTD
ACCESSION NUMBER: 1985-250847 [41] WPIDS
DOC. NO. CPI: C1985-108657
TITLE: Compsn. for detecting proteolytic and esterolytic enzymes - esp. in body fluids, contg. aminoacid or peptide ester substrate and undecanol as accelerator.
DERWENT CLASS: B04 D16
INVENTOR(S): SCHNABEL, E
PATENT ASSIGNEE(S): (MILE) MILES LAB INC
COUNTRY COUNT: 10
PATENT INFORMATION:

PATENT NO	KIND	DATE	WEEK	LA	PG
EP 157361	A	19851009	(198541)*	GE	32
R: DE FR GB IT NL SE					
DE 3413119	A	19851024	(198544)		
AU 8540141	A	19851010	(198548)		
JP 60224500	A	19851108	(198551)		
ES 8607399	A	19861101	(198701)		
CA 1253056	A	19890425	(198921)		
EP 157361	B	19890823	(198934)	GE	
R: DE FR GB IT NL SE					
DE 3572511	G	19890928	(198940)		
JP 05050276	B	19930728	(199333)		11

APPLICATION DETAILS:

PATENT NO	KIND	APPLICATION	DATE

EP 157361	A	EP 1985-103668	19850327
DE 3413119	A	DE 1984-3413119	19840406
ES 8607399	A	ES 1985-541868	19850402
JP 05050276	B	JP 1985-69244	19850403

FILING DETAILS:

PATENT NO	KIND		PATENT NO
JP 05050276	B	Based on	JP 60224500

PRIORITY APPLN. INFO: DE 1984-3413119 19840406

AN 1985-250847 [41] WPIDS

AB EP 157361 A UPAB: 19930925

Compsn. for detecting esterolytic and/or proteolytic enzymes comprises (1) an amino acid or peptide ester (I) of a phenol as colour-forming substrate and (2) n-undecanol (II) to accelerate enzymatic cleavage of (I). Pref. the **reagents** are incorporated into an inert carrier, esp. in the form of a test strip.

(II) is used at 0.001-0.1 wt.% in the test soln., corresponding to 0.5-5 wt.% in the soln. used for impregnating the carrier. The **reagent** may also contain a diazonium salt (III); a buffer, pref. for pH 7-9, and usual carriers or auxiliaries, particularly a **detergent** at 0.1-5 wt.% of the impregnating soln.. (I) and (III) are each used at 1-10 mm in the impregnating soln..

USE/ADVANTAGE - The compsn. is used to test liquids, esp. body fluids, for enzymatic activity; particularly for **detecting leucocytes** in urine (for diagnosing diseases of the kidneys or urogenital tract). Addn. of (II) provides a more rapid and sensitive assay.

0/0

ABEQ EP 157361 B UPAB: 19930925

Agent for the detection of esterolytic and/or proteolytic enzymes, containing (a) an aminoacid ester or peptide ester of a phenol, as the chromogenic enzyme substrate, and (b) an alcohol as the substance which accelerates the enzymatic cleavage of the aminoacid ester bond or peptide ester bond of component (a), characterised in that it contains n-undecanol as the accelerating substance.

ABEQ JP 93050276 B UPAB: 19931119

Compsn. for detecting esterolytic and/or proteolytic enzymes comprises (1) an amino acid or peptide ester (I) of a phenol as colour-forming substrate and (2) n-undecanol (II) to accelerate enzymatic cleavage of (I). Pref. the **reagents** are incorporated into an inert carrier, esp. in the form of a test strip.

(II) is used at 0.001-01 wt.% in the test soln., corresponding

to 0.5-5 wt.% in the soln. used for impregnating the carrier. The **reagent** may also contain a diazonium salt (III); a buffer, pref. for pH 7-9, and usual carriers or auxiliaries, particularly a **detergent** of 0.1-5 wt.% of the impregnating soln.. (I) and (III) are each used at 1-10 mm in the impregnating soln..

USE/ADVANTAGE - The compsn. is used to test liquids, esp. body fluids, for enzymatic activity; particularly for **detecting leucocytes** in urine (for diagnosing diseases of the kidneys or urogenital tract). Addn. of (II) provides a more rapid and sensitive assay. (J60224500-A)

L27 ANSWER 16 OF 30 WPIDS COPYRIGHT 2001 DERWENT INFORMATION LTD
ACCESSION NUMBER: 1985-075739 [13] WPIDS
DOC. NO. NON-CPI: N1985-056717
DOC. NO. CPI: C1985-032946
TITLE: Reagent for assaying glucose, cholesterol, uric acid and haemoglobin - contains thymol as phenol component of colour forming system.
DERWENT CLASS: B04 D13 J04 S03
INVENTOR(S): DAROCZI, I; FARAGO, F; JANCSO, T; ZAJKA, G
PATENT ASSIGNEE(S): (REAN-N) REANAL FINOMVEGYSZERGYAR
COUNTRY COUNT: 7
PATENT INFORMATION:

PATENT NO	KIND	DATE	WEEK	LA	PG
DE 3432348	A	19850321	(198513)*		34
FI 8403428	A	19850303	(198525)		
DD 232558	A	19860129	(198622)		
ES 8700881	A	19870201	(198712)		
CS 8406580	A	19870716	(198734)		
CH 669673	A	19890331	(198916)		
SU 1505444	A	19890830	(199010)		

APPLICATION DETAILS:

PATENT NO	KIND	APPLICATION	DATE
DE 3432348	A	DE 1984-3432348	19840903
ES 8700881	A	ES 1985-544552	19850625
SU 1505444	A	SU 1984-3786908	19840831

PRIORITY APPLN. INFO: HU 1983-3059 19830902
AN 1985-075739 [13] WPIDS
AB DE 3432348 A UPAB: 19930925
Reagent for **determining** glucose, cholesterol, uric acid or **haemoglobin** comprises (1)

1-phenyl-2,3-dimethyl -4-aminopyrazol-5-one (I); (2) a phenol deriv.; (3) buffer soln.; (4) at least 1 stabiliser, and opt. (5) at least one **detergent** and/or (6) at least one enzyme catalyst. The new feature is that component (2) is thymol (II). Pref. (II) is present as a soln. in 1-4C alcohol, esp. EtOH.

(II) is 2.3-2.7, esp. 2.5 mM; (I) 0.6-1, esp. 0.8 mM and the buffer is aq. Na2HPO4-KH2PO4 at 0.06-0.1, esp. 0.08 M. The pref. stabiliser is NaN3 at 9.75-9.95, esp. 9.85 mM and the **detergents** are polyoxyethylene ether and/or polyalkanolalkyl ether at 0.2-1, esp. 0.4 wt.%.

The pref. enzymes are (A) glucose oxidase at 8-12, esp. 10, units/ml plus peroxidase at 13-17, esp. 15, units/ml; (B) cholesterinase at 8-12, esp. 10, units/ml; cholesterol oxidase at 4-6, esp. 5, units/ml and peroxidase as in A and (c) uricase at 4-6, esp. 5, units/ml and peroxidase as in A. The **reagent** pref. contains 310-350, esp. 330, mM alkanol.

USE/ADVANTAGE - The **reagent** is esp. used for assay of body fluids but can also be used to measure glucose in beverages and fruit juices. It provides a linear measurement plot and very high sensitivity; and is stable, providing a colour which is not sensitive to light. This colour is formed at pH 7-8 with absorption max. at 465-480 nm and takes only 15 min. to develop at 37 deg.C. 0/3

L27 ANSWER 17 OF 30 MEDLINE DUPLICATE 3

ACCESSION NUMBER: 85074210 MEDLINE
DOCUMENT NUMBER: 85074210 PubMed ID: 3965138
TITLE: Pattern of endogenous lectins in a human epithelial tumor.
AUTHOR: Gabius H J; Engelhardt R; Cramer F; Batge R; Nagel G A
SOURCE: CANCER RESEARCH, (1985 Jan) 45 (1) 253-7.
Journal code: CNF; 2984705R. ISSN: 0008-5472.
PUB. COUNTRY: United States
Journal; Article; (JOURNAL ARTICLE)
LANGUAGE: English
FILE SEGMENT: Priority Journals
ENTRY MONTH: 198501
ENTRY DATE: Entered STN: 19900320
Last Updated on STN: 19900320
Entered Medline: 19850125

AB Salt and **detergent** extracts of a malignant epithelial tumor, obtained by extraction of acetone powder, were fractionated on different sets of Sepharose columns covalently derivatized with lactose, asialofetuin, melibiose, mannan, fucose, and heparin. Successive elution by chelating **reagent** and specific sugar resulted in isolation of different Ca2+-dependent and Ca2+-independent endogenous carbohydrate-binding proteins, as

analyzed by gel electrophoresis. It appears from the analysis that certain bands represent newly identified proteins capable of binding to lactose (at Mr 64,000), melibiose (at Mr 28,000), and fucose (at Mr 62,000 and 70,000). Other carbohydrate-binding proteins isolated from this human tumor have been identified in normal, especially embryonic, tissues of different nonhuman vertebrates. The carbohydrate-binding proteins are assayable as agglutinin with rabbit **erythrocytes** and show no **detectable** enzymatic activity. They can thus be defined as lectins. The presence of a complex pattern of endogenous lectins and their biochemical characteristics may contribute to an understanding of intercellular interaction during the complex process of metastatic spread and may furthermore allow a new tool for diagnosis and a lectin-based therapy.

L27 ANSWER 18 OF 30 WPIDS COPYRIGHT 2001 DERWENT INFORMATION LTD
ACCESSION NUMBER: 1985-012101 [02] WPIDS
DOC. NO. NON-CPI: N1985-008729
DOC. NO. CPI: C1985-005132
TITLE: Reagent for dilution and lysis of whole blood - contains quat. ammonium detergent and anion to prevent platelet aggregation.
DERWENT CLASS: B04 E16 E37 J04 S03
INVENTOR(S): LARSEN, F L
PATENT ASSIGNEE(S): (COUE) COULTER ELECTRONICS INC
COUNTRY COUNT: 15
PATENT INFORMATION:

PATENT NO	KIND	DATE	WEEK	LA	PG
WO 8404969	A	19841220	(198502)*	EN	19
RW: AT BE CH DE FR GB LU NL SE					
W: AU DE GB JP					
AU 8429696	A	19850104	(198513)		
EP 146590	A	19850703	(198527)	EN	
R: BE CH DE FR GB LI SE					
US 4529705	A	19850716	(198531)		
JP 60501522	W	19850912	(198543)		
CA 1222679	A	19870609	(198727)		
ES 8707612	A	19871016	(198747)		

APPLICATION DETAILS:

PATENT NO	KIND	APPLICATION	DATE
WO 8404969	A	WO 1984-US768	19840518
EP 146590	A	EP 1984-902276	19840518
US 4529705	A	US 1983-501028	19830606

JP 60501522 W JP 1984-502232 19840518
ES 8707612 A ES 1984-553098 19840604

PRIORITY APPLN. INFO: US 1983-501028 19830606
AN 1985-012101 [02] WPIDS
AB WO 8404969 A UPAB: 19930925
Reagent comprises an aq. soln. contg. (1) a quat. ammonium **detergent** (I) for lysis of the red blood cells; and (2) sulphate, carbonate, formate or acetate anion to prevent platelet aggregation in the blood sample.

Pref. salt includes a Na, K, NH4, Mg, Ca or tris(hydroxymethyl) aminomethyl cation, esp. a sulphate. The sulphate ion concn. is 30-180 mmoles/l e.g. it is 60-100 for Na2SO4. The **reagent** may contain a carbonate of these cations; and also KCN. The **detergent** is cetyldimethylammonium bromide or tetradecyltrimethylammonium bromide.

USE/ADVANTAGE - The **reagent** is esp. useful in automatic instruments for blood particle counting and **haemoglobin determn**. The **white blood** cells remain as individually countable particles, esp. by the ''Coulter'' (RTM) electron impedence method.
0/0
ABEQ US 4529705 A UPAB: 19930925
Reagent for dilution and lysis of blood samples comprises an aq. soln. contg. a quat. ammonium salt (pref. cetyldimethylethylammonium or tetradecyltrimethyl-ammonium bromide, e.g. 1.1 g/dm3) for the lysis of red blood cells; one or more salts (0.030-0.180 mol/dm3) contg. SO2-4, CO2-3, HCOO- and/or OAc- ions, pref. Na, NH4, Mg, Ca or tris(hydroxymethyl)aminomethyl cations, to prevent aggregation of platelets; and an alkali metal cyanide (e.g. KCN, 0.005-0.65 g/dm3) to convert haemoglobin to a chromogen; buffered with phosphate (pH 7-11).

USE - The prod. facilitates the electronic counting of white blood cells and the determination of haemoglobin content.

L27 ANSWER 19 OF 30 MEDLINE DUPLICATE 4
ACCESSION NUMBER: 84107163 MEDLINE
DOCUMENT NUMBER: 84107163 PubMed ID: 6692568
TITLE: Alkaline haematin D-575, a new tool for the determination of haemoglobin as an alternative to the cyanhaemiglobin method. I. Description of the method.
AUTHOR: Zander R; Lang W; Wolf H U
SOURCE: CLINICA CHIMICA ACTA, (1984 Jan 16) 136 (1) 83-93. Journal code: DCC; 1302422. ISSN: 0009-8981.
PUB. COUNTRY: Netherlands
Journal; Article; (JOURNAL ARTICLE)
LANGUAGE: English

FILE SEGMENT: Priority Journals
ENTRY MONTH: 198403
ENTRY DATE: Entered STN: 19900319
Last Updated on STN: 19900319
Entered Medline: 19840320

AB A new method for the rapid and accurate **measurement** of **haemoglobin** has been developed as an alternative to the conventional cyanhaemiglobin method. This method is based on the conversion of all haeme, haemoglobin, and haemiglobin species into a stable end product by an alkaline solution of a non-ionic **detergent** ('AHD **reagent**'). The reaction product, designated as alkaline haematin D-575, is extremely stable and shows a characteristic absorption peak at 575 nm. As compared to the cyanhaemiglobin method, the **determination** of **haemoglobin** by alkaline haematin D-575 offers several advantages such as (1) extreme stability of the AHD **reagent** and the conversion product, (2) decreased conversion time of all haemoglobin species into the end product, (3) decreased amounts of plasma and cell errors, and errors caused by delayed conversion of carboxy- and fetal haemoglobins, and (4) standardisation by a primary standard (purified crystalline chlorohaemin).

L27 ANSWER 20 OF 30 WPIDS COPYRIGHT 2001 DERWENT INFORMATION LTD
ACCESSION NUMBER: 1983-25545K [11] WPIDS
DOC. NO. NON-CPI: N1983-046423
DOC. NO. CPI: C1983-024995
TITLE: Electro-optical determination of red blood cell vol. - with blood sample treated with sphering agent and protein for stability.
DERWENT CLASS: B04 J04 S03
INVENTOR(S): KIM, Y R; ORNSTEIN, L
PATENT ASSIGNEE(S): (TECD) TECHNICON INSTR CORP
COUNTRY COUNT: 16
PATENT INFORMATION:

PATENT NO	KIND	DATE	WEEK	LA	PG
EP 73554	A	19830309	(198311)*	EN	15
R: BE CH DE FR GB IT LI NL SE					
JP 58006468	A	19830114	(198311)		
US 4412004	A	19831025	(198345)		
CA 1170553	A	19840710	(198432)		
EP 73554	B	19850313	(198511)	EN	
R: BE CH DE FR GB IT LI NL SE					
DE 3262531	G	19850418	(198517)		
AU 8436033	A	19850530	(198529)		
JP 03046784	B	19910717	(199132)		
US 5045472	A	19910903	(199138)		

JP 06050970	A	19940225 (199413)	6
JP 07069324	B2	19950726 (199534)	5

APPLICATION DETAILS:

PATENT NO	KIND	APPLICATION	DATE
EP 73554	A	EP 1982-302524	19820518
JP 03046784	B	JP 1982-63257	19820417
US 5045472	A	US 1990-537887	19900614
JP 06050970	A	JP 1990-417972	19901219
JP 07069324	B2	JP 1990-417972	19820417

FILING DETAILS:

PATENT NO	KIND		PATENT NO
JP 07069324	B2	Based on	JP 06050970

PRIORITY APPLN. INFO: US 1981-277539 19810626

AN 1983-25545K [11] WPIDS

AB EP 73554 A UPAB: 19930925

Mammalian whole blood is treated to give a sample for electro-optical determn. of red blood cell vol. and it involves treating the whole blood with a first isotonic soln. contg. a sphering agent. Then an aliquot of the resulting mixt. is treated with a second isotonic soln. contg. protein and sphering agent. The wt. ratio of protein to sphering agent in the aliquot and in the final sample is 20:1-70:1; and the concn. of sphering agent in the final sample is 2-10 mg/100 ml.

Prepn. of stable, sphered and fixed mammalian red blood cells as calibration particles for flow cytometry comprises (a) combination of an anticoagulated whole blood sample with an isotonic soln. contg. sphering agent, followed by (b) treatment of the mixt. with a fixing agent soln. The prod. of step (a) has a wt. ratio of endogenous protein to sphering agent of 20:1-70:1 and a final concn. of sphering agent of 2-10 mg/100 ml.

Prolonged stability of the sphered red blood cells is achieved by control of the concn. of sphering agent and its ratio to protein. The protein ensures shaped consistency during processing as well as minimising change during handling etc. The procedures are used in diagnostic examination of red blood cell vol. etc.

ABEQ EP 73554 B UPAB: 19930925

Mammalian whole blood is treated to give a sample for electro-optical **determn.** of **red blood** cell vol. and it involves treating the whole blood with a first isotonic soln. contg. a sphering agent. Then an aliquot of the resulting mixt. is treated with a second isotonic soln. contg.

protein and sphering agent. The wt. ratio of protein to sphering agent in the aliquot and in the final sample is 20:1-70:1; and the concn. of sphering agent in the final sample is 2-10 mg/100 ml.

Prepn. of stable, sphered and fixed mammalian red blood cells as calibration particles for flow cytometry comprises (a) combination of an anticoagulated whole blood sample with an isotonic soln. contg. sphering agent, followed by (b) treatment of the mixt. with a fixing agent soln. The prod. of step (a) has a wt. ratio of endogenous protein to sphering agent of 20:1-70:1 and a final concn. of sphering agent of 2-10 mg/100 ml.

Prolonged stability of the sphered red blood cells is achieved by control of the concn. of sphering agent and its ratio to protein. The protein ensures shaped consistency during processing as well as minimising change during handling etc. The procedures are used in diagnostic examination of red blood cell vol. etc.

ABEQ US 5045472 A UPAB: 19930925

Compsn. for use in a cytometer, comprises: (a) an anticoagulated whole blood sample aliquot; and (b) a **reagent** mixt. of (i) an isotonic aq. soln.; (ii) a sphering agent; and (iii) a protein which reversibly binds the sphering agent (ii) and (iii) are present in wt. ratio of protein to sphering agent of 20:1 to 70:1. The sphering agent has a final concn. between 2mg per 100ml-10mg per 100ml in the **reagent** mixt.

Pref. protein is a serum albumin selected from bovine, human and egg, which is endogenous in whole blood sample. Pref sphering agent is **detergent**, phospholipid or fatty acid. The **reagent** mixt. may also contain a fixing agent.

USE - For more accurate and precise electroptical method for **measuring erythrocyte** volumes individually and as an average. @@

L27 ANSWER 21 OF 30 WPIDS COPYRIGHT 2001 DERWENT INFORMATION LTD
ACCESSION NUMBER: 1982-55184E [27] WPIDS
TITLE: determn. of human leucocyte antigen on lymphocytes - by complement induced lysis then measuring ATP content of un-lysed cells.
DERWENT CLASS: B04 D16 S03 S05
INVENTOR(S): SCHERER, R; TREFFERT, C; WULFF, K
PATENT ASSIGNEE(S): (BOEF) BOEHRINGER MANNHEIM GMBH
COUNTRY COUNT: 12
PATENT INFORMATION:

PATENT NO	KIND	DATE	WEEK	LA	PG
EP 54676	A	19820630	(198227)*	GE	18
R: AT BE CH DE FR GB IT LI LU NL SE					
DE 3047860	A	19820715	(198229)		
JP 57131063	A	19820813	(198238)		

EP 54676 B 19831102 (198345) GE
R: AT BE CH DE FR GB IT LI LU NL SE
DE 3161331 G 19831208 (198350)
JP 62032421 B 19870714 (198731)

APPLICATION DETAILS:

PATENT NO	KIND	APPLICATION	DATE
JP 57131063	A	JP 1981-203808	19811218

PRIORITY APPLN. INFO: DE 1980-3047860 19801218
AN 1982-55184E [27] WPIDS
AB EP 54676 A UPAB: 19930915

Determination of HLA (human **leucocyte** antigen) comprises first incubating lymphocytes with HLA-antiserum and complement so that ATP is released from complement-lysed cells. This is then destroyed with ATPase (pref. apyrase) and cells which have not already been lysed are quickly lysed and released ATP measured.

Esp. the second lysis is carried out with a **detergent** and the ATP is determined by treatment with luciferin-luciferase and measurement of the amt. of light emitted during a specified time interval. Also new is a **reagent** consisting of 0.05-2% nonionic **detergent**; 0.1-10 mg per l luciferase; 15-1000 micromol per l D-luciferin; 2.5-25 mmoles per l MgCl2; 0.05-12 mmoles per l EDTA; 0.05-12.5g per l bovine serum albumin; 5-2000 U per l apyrase and 5-100 mmoles per l buffer to pH 6-8.

The method is useful for identification of compatible blood and organ donors; in diagnosis of genetically-determined diseases and for determination of paternity.

The method is simple, suitable for automation and does not suffer from the subjective judgements associated with the microscopic method. The quality of the lymphocytes is not important and dead cells can be tolerated in the sample.

L27 ANSWER 22 OF 30 WPIDS COPYRIGHT 2001 DERWENT INFORMATION LTD
ACCESSION NUMBER: 1982-04184E [03] WPIDS
TITLE: Plastic measuring cell for haemoglobin determn. - contains buffered reagent soln. of specific potassium cyanide concn..
DERWENT CLASS: A96 B04 J04 S03 S05
INVENTOR(S): FRANK, G; WEHLING, K
PATENT ASSIGNEE(S): (FARB) BAYER AG
COUNTRY COUNT: 13
PATENT INFORMATION:

PATENT NO	KIND	DATE	WEEK	LA	PG

EP 43483	A	19820113 (198203)*	GE	10
R: AT BE CH DE FR GB IT LI NL SE				
DE 3024835	A	19820128 (198205)		
BR 8104160	A	19820316 (198213)		
JP 57056754	A	19820405 (198219)		
US 4349351	A	19820914 (198239)		
EP 43483	B	19840620 (198426)	GE	
R: AT BE CH DE FR GB IT LI NL SE				
DE 3164295	G	19840726 (198431)		
JP 63041023	B	19880815 (198836)		

APPLICATION DETAILS:

PATENT NO	KIND	APPLICATION	DATE
EP 43483	A	EP 1981-104780	19810622
JP 57056754	A	JP 1981-98460	19810626

PRIORITY APPLN. INFO: DE 1980-3024835 19800701

AN 1982-04184E [03] WPIDS

AB EP 43483 A UPAB: 19930915

A disposable, plastic **measuring** cell for use in **haemoglobin** (H6) **determn**. contains a **reagent** soln. consisting of KCN at 90-120 mg per 1; K hexacyanoferrate (III); a buffer for pH 7.1- 7.3, and a **detergent**. The cell is pref. made of polystyrene. The use of the **reagent** soln. is also claimed.

These solns. are stable in plastic cells with storage life of at least 12 months. There is no significant difference between reaction rates measured with these solns. and by the reference International Committee for Standardisation in Haematology (1CSH) procedure.

ABEQ EP 43483 B UPAB: 19930915

Plastic throw-away measuring cell for determining haemoglobin contains a reaction soln. of KCN, potassium hexacyanoferrate, a buffer and a detergent. The KCN concn. is adjusted to 90-120 mg/l (1.38-1.85 mmol./l) and the pH to 7.1-7.3.

Pref. the cell is made of polystyrene. The solns. have a stability of at least 12 months. Reaction rates measured with these solns. are not significantly different to those by ICSH-reference standards.

L27 ANSWER 23 OF 30 BIOSIS COPYRIGHT 2001 BIOSIS

ACCESSION NUMBER: 1983:189151 BIOSIS

DOCUMENT NUMBER: BA75:39151

TITLE: ISOLATION OF AN ANKYRIN BAND 3 OLIGOMER FROM HUMAN

ERYTHROCYTE MEMBRANES.

AUTHOR(S): BENNETT V
CORPORATE SOURCE: DEPARTMENT OF CELL BIOLOGY AND ANATOMY, JOHNS HOPKINS SCHOOL OF MEDICINE, 725 N. WOLFE STREET, BALTIMORE, MD. 21205, USA.

SOURCE: BIOCHIM BIOPHYS ACTA, (1982) 689 (3), 475-484.
CODEN: BBACAQ. ISSN: 0006-3002.
FILE SEGMENT: BA; OLD
LANGUAGE: English

AB A cytoskeleton-associated population of band 3 was isolated in milligram **quantities** from human **erythrocyte** membranes as a stable complex with ankyrin. The major population of band 3 (free band 3) was solubilized from ghosts with 0.1 M **KCl**/Triton X-100. A **detergent**-insoluble assembly of proteins (cytoskeletons) contained 10-15% of the band 3 as well as ankyrin, spectrin, band 4.1, actin and other minor polypeptides. The remaining band 3 and ankyrin were extracted in a 1:1 molar ratio from the cytoskeletons with 1 M **KCl**/Triton X-100 and were copurified with the same 1:1 stoichiometry during DEAE-chromatography and gel filtration. Free band 3 was isolated by the same procedures and was clearly resolved from ankyrin-associated band 3 on DEAE-chromatography and gel filtration. Direct evidence that ankyrin and band 3 were associated in a complex was provided by immunoprecipitation with antiankyrin IgG of band 3 from the native complex, but not of free band 3 or after denaturation of the complex. Ankyrin-associated band 3 contained a reactive site for H2DIDS (the dihydro analog of 4,4'-diisothiocyano-2,2'-stilbenedisulfonic acid) and thus had an anion transport site. Comparison of 125I-labeled .alpha.-chymotryptic peptide fragments of free band 3 and ankyrin-associated band 3 revealed extensive homology with 28 out of 30 identical fragments. The ankyrin-band 3 oligomer was arranged as an .alpha..beta. dimer with 1 polypeptide chain of each component, on the basis of the MW calculated from hydrodynamic parameters in dilute solution. Free band 3 behaved under the same conditions as a homodimer. Ankyrin-associated band 3 was capable of band 3 dimerization of concentrations of 1-3 .mu.M, since chemical cross-linking of the oligomer with Cu2+/o-phenanthroline produced a 190,000 MW band 3 dimer on SDS [sodium dodecyl sulfate] gels.

L27 ANSWER 24 OF 30 EMBASE COPYRIGHT 2001 ELSEVIER SCI. B.V.
ACCESSION NUMBER: 82242264 EMBASE
DOCUMENT NUMBER: 1982242264
TITLE: Isolation of an ankyrin-band 3 oligomer from human erythrocyte membranes.
AUTHOR: Bennett V.
CORPORATE SOURCE: Dep. Cell Biol. Anat., Johns Hopkins Sch. Med., Baltimore, MD 21205, United States

SOURCE: Biochimica et Biophysica Acta, (1982) 689/3 (474-484).
CODEN: BBACAQ
COUNTRY: Netherlands
DOCUMENT TYPE: Journal
FILE SEGMENT: 029 Clinical Biochemistry
LANGUAGE: English

AB A cytoskeleton-associated population of band 3 has been isolated in milligram **quantities** from human **erythrocyte** membranes as a stable complex with ankyrin. The major population of band 3 (free band 3) was solubilized from ghosts with 0.1 M **KCl**/Triton X-100. A **detergent**-insoluble assembly of proteins (cytoskeletons) contained 10-15% of the band 3, as well as ankyrin, spectrin, band 4.1 actin and other minor polypeptides. The remaining band 3 and ankyrin were extracted in a 1:1 molar ratio from the cytoskeletons with 1 M **KCl**/Triton X-100, and were copurified with the same 1:1 stoichiometry during DEAE-chromatography, and gel filtration. Free band 3 was isolated by the same procedures, and was clearly resolved from ankyrin-associated band 3 on DEAE-chromatography and gel filtration. Direct evidence that ankyrin and band 3 were associated in a complex was provided by immunoprecipitation with anti-ankyrin IgG of band 3 from the native complex, but not of free band 3 or after denaturation of the complex. Ankyrin-associated band 3 contained a reactive site for H2DIDS (the dihydroanalog of 4,4'-diisothiocyano-2,2'-stilbenedisulfonic acid) and thus has an anion transport site. Comparison of 125I-labeled .alpha.-chymotryptic peptide fragments of free band 3 and ankyrin-associated band 3 revealed extensive homology with 28 out of 30 identical fragments. The ankyrin-band 3 oligomer is arranged as an .alpha..beta. dimer with one polypeptide chain of each component, based on the molecular weight calculated from hydrodynamic parameters in dilute solution. Free band 3 behaved under the same conditions as a homodimer. Ankyrin-associated band 3 was capable of band 3 dimerization at concentrations of 1-3 .mu. M, since chemical cross-linking of the oligomer with Cu2+/o-phenanthroline produced a 190 000 M(r) band 3 dimer on SDS gels.

L27 ANSWER 25 OF 30 MEDLINE DUPLICATE 5

ACCESSION NUMBER: 82135523 MEDLINE
DOCUMENT NUMBER: 82135523 PubMed ID: 7059603
TITLE: A rapid and sensitive assay for determination of cholesterol in membrane lipid extracts.
AUTHOR: Ott P; Binggeli Y; Brodbeck U
SOURCE: BIOCHIMICA ET BIOPHYSICA ACTA, (1982 Feb 23) 685 (2) 211-3.
Journal code: A0W; 0217513. ISSN: 0006-3002.
PUB. COUNTRY: Netherlands

Journal; Article; (JOURNAL ARTICLE)
LANGUAGE: English
FILE SEGMENT: Priority Journals
ENTRY MONTH: 198205
ENTRY DATE: Entered STN: 19900317
Last Updated on STN: 19900317
Entered Medline: 19820521

AB A commercially available enzymatic assay (Boehringer Monotest) was modified to allow a rapid and sensitive determination of cholesterol in membrane lipid extracts. This was achieved by adding 0.5% Triton X-100 to the **reagent** solution. The **detergent** did not interfere with the assay. The relationship between the amount of cholesterol per assay and the absorbance at 500 nm was linear up to 100 micrograms. The recovery in the assay was better than 95%. The assay was applied to the **determination** of cholesterol in **erythrocyte** membrane lipid extracts.

L27 ANSWER 26 OF 30 WPIDS COPYRIGHT 2001 DERWENT INFORMATION LTD
ACCESSION NUMBER: 1981-23281D [13] WPIDS
TITLE: Test kit for glycosylated haemoglobin assay - comprises lysis agent, oxidising agent for haemoglobin, haem binding ligand and allosteric site binder.
DERWENT CLASS: B04 J04 S03 S05
INVENTOR(S): MOORE, E G; STROUPE, S D
PATENT ASSIGNEE(S): (ABBO) ABBOTT LAB
COUNTRY COUNT: 1
PATENT INFORMATION:

PATENT NO	KIND	DATE	WEEK	LA	PG
US 4255385	A	19810310	(198113)*		

PRIORITY APPLN. INFO: US 1978-973368 19781226; US 1979-87367 19791023
AN 1981-23281D [13] WPIDS
AB US 4255385 A UPAB: 19930915
A test kit for **determining** glycosylated **haemoglobin** (GHb) in blood consists of **reagent** containers holding, separately or together, (a) erythrocyte lysis agent; (b) oxidising agent for converting haemoglobin (Hb) to methaemoglobin; (c) a haem-binding ligand and (d) an allosteric binding site substance which binds to the allosteric sites of non-glycosylated Hb. The kit can also include GHb standards or controls.
Pref. components are (a) a **detergent**; (b) K

ferricyanide; (c) imidazole and (d) inositol hexaphosphate. Also claimed are **reagents** consisting of (a), (b), (c) and opt. (d), all in a diluent.

This is a continuation of 4200435 (34395C) which describes determination of GHb with such a kit.

The kit is used for diagnosis and monitoring of diabetes mellitus (which is associated with high GHb levels).

L27 ANSWER 27 OF 30 WPIDS COPYRIGHT 2001 DERWENT INFORMATION LTD
ACCESSION NUMBER: 1979-56491B [31] WPIDS
TITLE: **Haemoglobin** photometric **determn**. - using **reagent** contg. aqueous alkali and a **detergent**.
DERWENT CLASS: B04 J04 S03 S05
INVENTOR(S): LANG, W; WOLF, H U
PATENT ASSIGNEE(S): (BAND-I) ZANDER R; (ZAND-I) ZANDER R
COUNTRY COUNT: 12
PATENT INFORMATION:

PATENT NO	KIND	DATE	WEEK	LA	PG
DE 2803109	A	19790726	(197931)*		
EP 3340	A	19790808	(197932)	GE	
R: BE CH DE FR GB IT LU NL SE					
JP 54148595	A	19791120	(198001)		
BE 47	T	19800321	(198020)		
SE 8002469	A	19800527	(198024)		
NL 7915009	A	19800630	(198029)		
GB 2052056	A	19810121	(198104)		
AT 7900432	A	19811015	(198145)		
FR 2482729	A	19811120	(198152)		
US 4341527	A	19820727	(198232)		
GB 2052056	B	19830112	(198302)		
CH 646525	A	19841130	(198451)		
DE 2803109	C	19870226	(198708)		
JP 63042230	B	19880822	(198837)		
IT 1148290	B	19861126	(198846)		

PRIORITY APPLN. INFO: DE 1978-2803109 19780125
AN 1979-56491B [31] WPIDS
AB DE 2803109 A UPAB: 19930901
New **reagent** for the photometric **determination** of the **haemoglobin** content of blood, which yields a characteristic colouration on mixing with the blood specimen, comprises an aqueous alkaline solution to which is added a water-soluble, non-ionic **detergent**, all haemoglobin and

haeme derivs. occurring in the blood being converted into a uniform end-product with a marked absorption maximum in the visible spectrum. The specimen is haemolysed by adding the above **reagent** then the alkaline haematin is determined photometrically.

Reliable haemoglobin assay with the advantages (e.g. inclusion of all haemoglobin derivs.; applicability of Lambert-Beer law over a wide range of haemoglobin concns.) but not the disadvantages (e.g. toxicity of **reagents**, instability of reaction solutions) of the cyanhaemoglobin method, is provided.

L27 ANSWER 28 OF 30 WPIDS COPYRIGHT 2001 DERWENT INFORMATION LTD
ACCESSION NUMBER: 1979-27393B [14] WPIDS
TITLE: Reagent for determn. of blood and haemoglobin in biological liquids - incorporates a film-forming agent and organic hydroperoxide with amine having high pK value.
DERWENT CLASS: A96 B04 J04 S03 S05
INVENTOR(S): CELECHOVSK, O; SVOBODA, V
PATENT ASSIGNEE(S): (LACH-N) LACHEMA NP
COUNTRY COUNT: 1
PATENT INFORMATION:

PATENT NO	KIND	DATE	WEEK	LA	PG
SU 607140	A	19780426	(197914)*		

PRIORITY APPLN. INFO: SU 1975-2183752 19751028
AN 1979-27393B [14] WPIDS
AB SU 607140 A UPAB: 19930901
Reagents for **determing** blood and **haemoglobin** in biological fluids are complex mixtures contg. an organic peroxide and a peroxidase activator. Both sensitivity and storage life are increased by adding a film-forming agent, e.g., pollyvinylpyrrolidone and an organic hydroperoxide in the form of a salt with an org. amine of dissociation constant >8. The **reagent** comprises nwt.%): film-forming agent 2.5-25; hydroperoxide salt (e.g. phenylisopropyl-peroxide salt) 2-20; chromogen ne.g., benzidine) 0.5-5; **detergent** (e.Gg. Na laurylsulphonate) 0.004-4; peroxide activator (e.g. quinine) 0.1-10; organic amine (e.g. 2-methyl-2-amino-1,3-propanediol) 0.2-40 and remainder is acid buffer to give overall pH of 2.5-5.0.

L27 ANSWER 29 OF 30 MEDLINE DUPLICATE 6
ACCESSION NUMBER: 76116642 MEDLINE
DOCUMENT NUMBER: 76116642 PubMed ID: 1248115

TITLE: Erythrocyte porphyrin analysis in the detection of lead poisoning in children: evaluation of four micromethods.

AUTHOR: Hanna T L; Dietzler D N; Smith C H; Gupta S; Zarkowsky H S

SOURCE: CLINICAL CHEMISTRY, (1976 Feb) 22 (2) 161-8.
Journal code: DBZ; 9421549. ISSN: 0009-9147.
PUB. COUNTRY: United States
Journal; Article; (JOURNAL ARTICLE)
LANGUAGE: English
FILE SEGMENT: Priority Journals
ENTRY MONTH: 197604
ENTRY DATE: Entered STN: 19900313
Last Updated on STN: 19980206
Entered Medline: 19760423

AB We evaluated four procedures for **determination** of **erythrocyte** porphyrin: double extraction with ethyl acetate/acetic acid-**HCl**, single extraction with ethanol, single extraction with acetone, and direct solubilization with **detergent**-buffer. The ethyl acetate procedure, when used with two portions of **HCl**, apparently gives complete recovery of porphyrin and is suitable for reference as a comparison method. The ethanol procedure gives a high and consistent recovery and is technically simpler. The acetone procedure gives low and variable recovery of porphyrin, and the **detergent**-buffer method is subject to serious hemoglobin interference; neither of these two procedures offers any technical advantage. Stability of samples and methods for standardization were explored. A procedure for expressing results in terms of erythrocyte Zn-protoporphyrin content is given. Because of its stability, coproporphyrin is useful as a daily working standard. The ethyl acetate and ethanol methods are about equally efficient for detecting lead intoxication. Because of its simplicity, the ethanol method seems to be the best for use in screening.

L27 ANSWER 30 OF 30 JAPIO COPYRIGHT 2001 JPO
ACCESSION NUMBER: 2000-055913 JAPIO
TITLE: **MEASUREMENT** OF **HEMOGLOBIN** IN BLOOD SAMPLE AND **REAGENT** FOR **DETECTING LEUKOCYTE**
INVENTOR: VERIAC SYLVIE; CHAMPSEIX HENRI
PATENT ASSIGNEE(S): ABX SA)
PATENT INFORMATION:

PATENT NO	KIND	DATE	ERA	MAIN IPC
JP 2000055913A		20000225	Heisei	G01N033-49

JP

APPLICATION INFORMATION

ST19N FORMAT:	JP1999-219644	19990803
ORIGINAL:	JP11219644	Heisei
PRIORITY APPLN. INFO.:	FR1998 9810010	19980804
SOURCE:	PATENT ABSTRACTS OF JAPAN (CD-ROM), Unexamined Applications, Vol. 2000	

AN 2000-055913 JAPIO

AB PROBLEM TO BE SOLVED: To provide an analysis **reagent** for **measuring hemoglobin** and for **detecting leukocyte** in a blood sample without using any cyanic compound.

SOLUTION: A **reagent** consists of at least one cation-type **detergent**, a glycoside type compound, especially saponin, at least one inorganic salt, and/or a substance with permeation operation and/or leukocyte protection operation, and organic and/or inorganic buffer agent for selectively adjusting the pH of the **reagent** to either essential neutral value (pH value ranging from 5 to 8) or a base value (pH value ranging from 8 to 12). This sort of analysis **reagent** is applied to blood analysis in human medicine and veterinary medicine.

FILE 'HOME' ENTERED AT 12:19:48 ON 13 JUL 2001